



210 N. Park Ave
Winter Park, FL
32789

P.O. Drawer 200
Winter Park, FL
32790-0200

Tel: 407-740-8575

Fax: 407-740-0613

tmi@tminc.com

Mr. William D'Haeseleer
Director Communications
Florida Public Service Commission
Division of Communication
2540 Shumard Oak Boulevard
Gerald L. Gunter Building, Room 270
Tallahassee, FL 32399-0850

RE: FirstWorld Communications, Inc.
Interexchange Carrier Application

Dear Mr. D'Haeseleer:

Enclosed for filing are the original and eight (8) copies of the above referenced application of FirstWorld Communications, Inc. FirstWorld is seeking authority to provide interexchange carrier services in Florida.

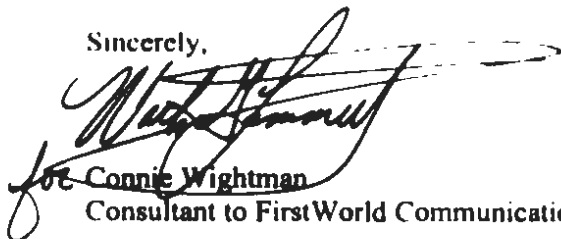
Enclosed is a check in the amount of \$250.00 to cover the filing fee.

Please acknowledge receipt of this filing by date-stamping the extra copy of this cover letter and returning it to my attention in the self-addressed, stamped envelope which has been provided for that purpose.

Questions pertaining to this application or tariff should be directed to my attention at (407) 740-8575.

Thank you for your assistance.

Sincerely,


Jo Ann Hill
Consultant to FirstWorld Communications, Inc.

CW:pa

cc: Jo Ann Hill - FirstWorld
file: FirstWorld - Florida IXC
tms: FLI9800

July 7, 1998
Via Overnight Delivery

980831-T1

DEPOSIT DATE
D 8 07 JUL 08 1998

98 JUL 8 PM 1:13
MAIL ROOM

Check received with filing and forwarded to Fiscal for deposit. Fiscal to forward a copy of check to RAR with proof of deposit.

Initials of person who forwarded check:

07184 JUL-8 8

**FLORIDA PUBLIC SERVICE COMMISSION
DIVISION OF COMMUNICATIONS
BUREAU OF SERVICE EVALUATION**

**APPLICATION FORM
for
AUTHORITY TO PROVIDE
INTEREXCHANGE TELECOMMUNICATIONS SERVICE
WITHIN THE STATE OF FLORIDA**

Instructions

- A. This form is used for an original application for a certificate and for approval of sale, assignment or transfer of an existing certificate. In case of a sale, assignment or transfer, the information provided shall be for the purchaser, assignee or transferee (See Appendix A).
- B. Respond to each item requested in the application and appendices. If an item is not applicable, please explain why.
- C. Use a separate sheet for each answer which will not fit the allotted space.
- D. If you have questions about completing the form, contact:

**Florida Public Service Commission
Division of Communications
Bureau of Service Evaluation
2540 Shumard Oak Boulevard
Gunter Building
Tallahassee, Florida 32399-0850
(904) 413-6600**

- E. Once completed, submit the original and six (6) copies of this form along with a non-refundable application fee of \$250.00 to:

**Florida Public Service Commission
Division of Administration
2540 Shumard Oak Blvd.
Gunter Building
Tallahassee, Florida 32399-0850
(904) 413-6251**

1. Select what type of business your company will be conducting (check all that apply):

- Facilities based carrier** - company owns and operates or plans to own and operate telecommunications switches and transmission facilities in Florida.
- Operator Service Provider** - company provides or plans to provide alternative operator services for IXCs; or toll operator services to call aggregator locations; or clearinghouse services to bill such calls.
- Reseller** - company has or plans to have one or more switches but primarily leases the transmission facilities of other carriers. Bills its own customer base for services used.
- Switchless rebiller** - company has no switch or transmission facilities but may have a billing computer. Aggregates traffic to obtain bulk discounts from underlying carrier. Rebills end users at a rate above its discount but generally below the rate end users would pay for unaggregated traffic.
- Multi-Location Discount Aggregator** - company contracts with unaffiliated entities to obtain bulk/volume discounts under multi-location discount plans from certain underlying carriers. Then offers the resold service by enrolling unaffiliated customers.
- Prepaid Debit Card Provider** - any person or entity that purchases 800 access from an underlying carrier or unaffiliated entity for use with prepaid debit card service and/or encodes the cards with personal identification numbers.

2. **This is an application for:**

- Original Authority (new company)**
- Approval of transfer (to another certificated company)**
- Approval of assignment of existing certificate (to a noncertificated company)**
- Approval for transfer of control (To another certificated company.)**

3. **Name of corporation, partnership, cooperative, joint venture or sole proprietorship:**

FirstWorld Communications, Inc.

4. **Name under which the applicant will do business (fictitious name, etc.):**

FirstWorld Communications, Inc.

5. **National address (including street name & number, post office box, city, state and zip code).**

9333 Genesee Avenue
Suite 200
San Diego, California 92121
Telephone: (619) 552-8010
Facsimile: (619) 552-8006
Toll Free: (888) 644-4357

6. **Florida address (including street name & number, post office box, city, state and zip code).**

See #5 Above

7. **Structure of organization:**

- | | |
|--|---|
| <input type="checkbox"/> Individual | <input checked="" type="checkbox"/> Corporation |
| <input type="checkbox"/> Foreign Corporation | <input type="checkbox"/> Foreign Partnership |
| <input type="checkbox"/> General Partnership | <input type="checkbox"/> Limited Partnership |
| <input type="checkbox"/> Other, _____ | |

8. If applicant is an individual or partnership, please give name, title and address of sole proprietor or partners.

Not applicable.

(a) Provide proof of compliance with the foreign partnership statute (Chapter 620.169 FS), if applicable.

(b) Indicate if the individual or any of the partners have previously been:

(1) adjudged bankrupt, mentally incompetent, or found guilty of any felony or of any crime, or whether such actions may result from pending proceedings.

(2) officer, director, partner or stockholder in any other Florida certificated telephone company. If yes, give name of company and relationship. If no longer associated with the company, give reason why not.

9. If incorporated, please give:

(a) Proof from the Florida Secretary of State that the applicant has authority to operate in Florida.

Corporate charter number:

(b) Name and address of the company's Florida registered agent.

National Registered Agents Services, Inc.
526 East Park Avenue
Tallahassee, Florida 32301

(c) Provide proof of compliance with the fictitious name statute (Chapter 865.09 FS), if applicable.

Fictitious name registration number: **Not Applicable**

(d) Indicate if any of the officers, directors, or any of the ten largest stockholders have previously been:

- (1) adjudged bankrupt, mentally incompetent, or found guilty of any felony or of any crime, or whether such actions may result from pending proceedings.

No officer, director or stockholder of the Company has been adjudged bankrupt, mentally incompetent, or found guilty of any felony or of any crime. No officer, director or stockholder of the Company are involved in proceedings which may result in such action.

- (2) officer, director, partner or stockholder in any other Florida certificated telephone company. If yes, give name of company and relationship. If no longer associated with the company, give reason why not.

No officer, director, partner or stockholder of the Company is an officer, director or stockholder in any other Florida certificated telephone company.

10. Who will serve as liaison with the Commission in regard to (please give name, title, address and telephone number):

(a) The application:

Connie Wightman
Consultant to FirstWorld Communications, Inc.
Technologies Management, Inc.
P.O. Drawer 200
Winter Park, FL 32790-0200
Telephone: (407) 740-8575
Facsimile: (FAX) 740-0613

(b) Official Point of Contact for the ongoing operations of the company:

Regulatory Contact: Kevin Timpane
Telephone: (619) 552-8010 x 285
Facsimile: (619) 552-8006

Please identify any predecessor(s) of the Applicant and provide other names under which the Applicant has operated within the preceding five (5) years, including name, address, and telephone number.

Not Applicable

2. **CONTACT PERSON:** The name, title address, telephone number, and FAX number of the person to whom questions about this Application should be addressed are:

Connie Wightman
Consultant to FirstWorld Communications, Inc.
210 North Park Avenue
Winter Park, FL 32789
Telephone: (407) 740-8575
Facsimile: (407) 740-0613

(c) Tariff:

Connie Wightman
Consultant to FirstWorld Communications, Inc.
Technologies Management, Inc.
P.O. Drawer 200
Winter Park, FL 32790-0200
Telephone: (407) 740-8575
Facsimile: (FAX) 740-0613

(d) **Complaints/Inquiries from customers:**

FirstWorld Communications, Inc.

9333 Genesee Avenue

Suite 200

San Diego, California 92121

Contact: Jo Ann Hill

Telephone: (619) 552-8010

Facsimile: (619) 552-8006

Toll Free: (888) 644-4357

11. List the states in which the applicant:

(a) Has operated as an interexchange carrier.

California

(b) Has applications pending to be certificated as an interexchange carrier.

Pennsylvania

(c) Is certificated to operate as an interexchange carrier.

California

(d) Has been denied authority to operate as an interexchange carrier and the circumstances involved.

None

(e) Has had regulatory penalties imposed for violations of telecommunications statutes and the circumstances involved.

None

(f) Has been involved in civil court proceedings with an interexchange carrier, local exchange carrier or other telecommunications entity, and the circumstances involved.

None

12. What services will the applicant offer to other certified telephone companies:

- | | | | |
|-------------------------------------|---|--------------------------|-----------|
| <input type="checkbox"/> | Facilities | <input type="checkbox"/> | Operators |
| <input type="checkbox"/> | Billing and Collection | <input type="checkbox"/> | Sales |
| <input type="checkbox"/> | Maintenance | | |
| <input checked="" type="checkbox"/> | Other: None anticipated at this time | | |

13. Do you have a marketing program?

Yes

14. Will your marketing program:

- Pay commissions?
- Offer sales franchises?
- Offer multi-level sales incentives?
- Offer other sales incentives?

None of the above.

15. Explain any of the offers checked in question 14 (to whom, what amount, type of franchise, etc.).

Not applicable.

16. Who will receive the bills for your service (check all that apply)?

- | | |
|--|--|
| <input checked="" type="checkbox"/> Residential customers | <input checked="" type="checkbox"/> Business customers |
| <input type="checkbox"/> PATS providers | <input type="checkbox"/> PATS station end-users |
| <input type="checkbox"/> Hotels & motels | <input type="checkbox"/> Hotel & motel guests |
| <input type="checkbox"/> Universities | <input type="checkbox"/> Univ. dormitory residents |
| <input type="checkbox"/> Other:(specify) <u>Anyone who uses the services of the company.</u> | |

17. Please provide the following (if applicable):

(a) Will the name of your company appear on the bill for your services, and if not, who will the billed party contact to ask questions about the bill (provide name and phone number) and how is this information provided?

Yes.

(b) The name and address of the firm who will bill for your service.

**Ace*Comm
704 Quince Orchard Road, Suite 100
Gaithersburg, MD 20878
Telephone: (301) 721-3000**

18. Please provide all available documentation demonstrating that the applicant has the following capabilities to provide interexchange telecommunications service in Florida.

A. Financial Capability

Regarding the showing of financial capability, the following applies:

The application should contain the applicant's financial statements for the most recent 3 years, including:

1. the balance sheet
2. income statement
3. statement of retained earnings

See Attachment III.

Further, a written explanation, which can include supporting documentation, regarding the following should be provided to show financial capability.

1. Please provide documentation that the applicant has sufficient financial capability to provide the requested service in the geographic area proposed to be served
2. Please provide documentation that the applicant has sufficient financial capability to maintain the requested service.
3. Please provide documentation that the applicant has sufficient financial capability to meet its lease or ownership obligations.

NOTE: This documentation may include, but is not limited to, financial statements, a projected profit and loss statement, credit references, credit bureau reports, and descriptions of business relationships with financial institutions.

If available, the financial statements should be audited financial statements. If the applicant does not have audited financial statements, it shall be so stated. The unaudited financial statements should then be signed by the applicant's chief executive officer and chief financial officer. The signatures should affirm that the financial statements are true and correct.

B. Managerial capability.

See Attachment IV.

C. Technical capability.

As a reseller, Applicant relies on the technical expertise of its underlying carrier for maintenance of the network.

19. Please submit the proposed tariff under which the company plans to begin operation. Use the format required by Commission Rule 25-24.485 (example enclosed).

See Attachment II.

20. The applicant will provide the following interexchange carrier services (Check all that apply):

- MTS with distance sensitive per minute rates**
 - Method of access is FGA
 - Method of access is FGB
 - Method of access is FGD
 - Method of access is 800

- MTS with route specific rates per minute**
 - Method of access is FGA
 - Method of access is FGB
 - Method of access is FGD
 - Method of access is 800

- MTS with statewide flat rates per minute (i.e. not distance sensitive)**
 - Method of access is FGA
 - Method of access is FGB
 - Method of access is FGD
 - Method of access is 800

- MTS for pay telephone service providers.**

- Block of time calling plan (Reach Out Florida, Ring America, etc.)**

- 800 Service (Toll free)**

- WATS type service (Bulk or volume discount)**
 - Method of access is via dedicated facilities
 - Method of access is via switched facilities

- Private line services (Channel Services) (For ex. 1.544 mbps, DS-3, etc.)**

- Travel service**
 - Method of access is 950
 - Method of access is 800

- 900 service**

(X) Operator Services

- (X) Available to presubscribed customers**
- () Available to non presubscribed customers (for example, patrons of hotels, students in universities, patients in hospitals).**
- () Available to inmates**

Services included are:

- (X) Station assistance**
- (X) Person to person assistance**
- (X) Directory assistance**
- (X) Operator verify and interrupt**
- (X) Conference calling**

- 21. What does the end user dial for each of the interexchange carrier services that were checked in services included (above).**

For direct dialed calls, the caller dials 1+ the destination number. For toll-free calls, the end user dials 1+888 or 1+800, plus the destination number. For travel service calls: a toll free access number, plus identification number, plus the destination telephone number.

- 22. Other:**

**** APPLICANT ACKNOWLEDGMENT STATEMENT ****

1. REGULATORY ASSESSMENT FEE:

I understand that all telephone companies must pay a regulatory assessment fee in the amount of 15 of one percent of its gross operating revenue derived from intrastate business. Regardless of the gross operating revenue of a company, a minimum annual assessment fee of \$50 is required.

2. GROSS RECEIPTS TAX:

I understand that all telephone companies must pay a gross receipts tax of two and one-half percent on all intra and interstate business.

3. SALES TAX:

I understand that a seven percent sales tax must be paid on intra and interstate revenues.

4. APPLICATION FEE:

A non-refundable application fee of \$250.00 must be submitted with the application

5. RECEIPT AND UNDERSTANDING OF RULES:

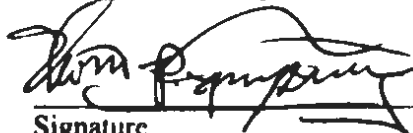
I acknowledge receipt and understanding of the Florida Public Service Commission's Rules and Orders relating to my provision of interexchange telephone service in Florida. I also understand that it is my responsibility to comply with all current and future Commission requirements regarding interexchange service.


7. ACCURACY OF APPLICATION:

By my signature below, I the undersigned owner or officer of the named utility in the application, attest to the accuracy of the information contained in this application and associated attachments. I have read the foregoing and declare that to the best of my knowledge and belief, the information is a true and correct statement.

Further, I am aware that pursuant to Chapter 837.06, Florida Statutes, "Whoever knowingly makes a false statement in writing with the intent to mislead a public servant in the performance of his official duty shall be guilty of a misdemeanor of the second degree, punishable as provided in s. 775.082 and s. 775.083".

UTILITY OFFICIAL:


Signature


Date

Kevin Timpane
Vice President - Public Policy

(619) 552-8010

APPENDICES:

- A - CERTIFICATE TRANSFER STATEMENT
- B - CUSTOMER DEPOSITS AND ADVANCE PAYMENTS
- C - INTRASTATE NETWORK
- D - FLORIDA TELEPHONE EXCHANGES AND EAS ROUTES

ATTACHMENTS:

- I - AUTHORITY TO OPERATE IN FLORIDA
- II - PROPOSED TARIFF
- III - FINANCIAL STATEMENTS
- IV - MANAGERIAL AND TECHNICAL CAPABILITIES

**** APPENDIX A ****

CERTIFICATE OF TRANSFER STATEMENT

I, _____, of (Name of Company), and current holder of certificate number _____, have reviewed this application and join in the petitioner's request for a transfer of the above-mentioned certificate.

Not Applicable

UTILITY OFFICIAL:

Signature

Date

Client Name and Title

Telephone

**** APPENDIX B ****

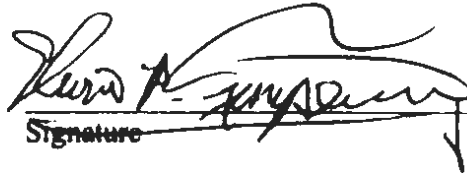
CUSTOMER DEPOSITS AND ADVANCE PAYMENTS

A statement of how the Commission can be assured of the security of the customer's deposits and advance payments may be responded to in one of the following ways (applicant please check one):

- (X) **The applicant will not collect deposits nor will it collect payments for service more than one month in advance.**

- () **The applicant will file with the Commission and maintain a surety bond in an amount equal to the current balance of deposits and advance payments in excess of one month. (Bond must accompany application.)**

UTILITY OFFICIAL:


Signature


Date

Kevin Timpane, Vice President-Public Policy
FirstWorld Communications, Inc.
9333 Genesee Avenue
Suite 200
San Diego, California 92121
Telephone: (619) 552-8010
Facsimile: (619) 552-8006
Toll Free: (888) 644-4357

**** APPENDIX C ****

INTRASTATE NETWORK

1. POP: Addresses where located, and indicate if owned or leased.

- 1) None.
- 2)
- 3)
- 4)

2. SWITCHES: Address where located, by type of switch and indicate if owned or leased.

- 1) None.
- 2)
- 3)
- 4)

3. TRANSMISSION FACILITIES: POP-to-POP facilities by type of facilities (microwave, fiber copper, satellite, etc.) and indicate if owned or leased.

POP-to-POP	TYPE	OWNERSHIP
-------------------	-------------	------------------

- 1) None.
- 2)
- 3)

4. ORIGINATING SERVICE: Please provide the list of exchanges where you are proposing to provide originating service within thirty (30) days after the effective date of the certificate. (Appendix D)

Statewide

5. TRAFFIC RESTRICTIONS: Please explain how the applicant will comply with the EAEA requirements contained in Commission Rule 25-24.471 (4)(a) (copy enclosed).

Not applicable

6. **CURRENT FLORIDA INTRASTATE SERVICES:** Applicant has () or has not (X) previously provided intrastate telecommunications in Florida. If the answer is has, fully describe the following:

(a) What services have been provided and when did these service begin?

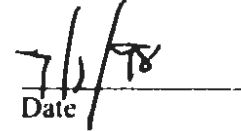
Not applicable

(b) If the services are not currently offered, when were they discontinued?

Not applicable.

UTILITY OFFICIAL:


Signature


Date

Kevin Timpane, Vice President-Public Policy
FirstWorld Communications, Inc.
9333 Genesee Avenue
Suite 200
San Diego, California 92121
Telephone: (619) 552-8010
Facsimile: (619) 552-8006
Toll Free: (888) 644-4357

**** APPENDIX D ****

**FLORIDA TELEPHONE EXCHANGES
AND
EAS ROUTES**

Describe the service area in which you hold yourself out to provide service by telephone company exchange. If all services listed in your tariff are not offered at all locations, so indicate.

In an effort to assist you, attached is a list of major exchanges in Florida showing the small exchanges with which each has extended area service (EAS).

**** FLORIDA EAS FOR MAJOR EXCHANGES ****

Extended Service Area with These Exchanges

PENSACOLA:	Cantonment, Gulf Breeze, Pace, Milton Holley-Navarre.
PANAMA CITY:	Lynn Haven, Panama City Beach, Youngstown-Fountain and Tyndall AFB.
TALLAHASSEE:	Crawfordville, Havana, Monticello, Panacea, Sopchoppy and St. Marks.
GAINESVILLE:	Alachua, Archer, Brooker, Hawthorne, High Springs, Melrose, Micanopy, Newberry and Waldo.
OCALE:	Bellevue, Citra, Dunnellon, Forest Lady Lake (B21), McIntosh, Iklawaha, Orange Springs, Salt Springs and Silver Springs Shores.
DAYTONA BEACH:	New Smyrna Beach.
TAMPA:	Central None East Plant City North Zephyrhills South Palmetto West Clearwater
CLEARWATER:	St. Petersburg, Tampa-West and Tarpon Springs.

ST. PETERSBURG:

Clearwater.

LAKELAND:

Bartow, Mulberry, Plant City, Polk City and Winter Haven.

ORLANDO:

Apopka, East Orange, Lake Buena Vista, Oviedo, Windermere, Winter Garden, Winter Park, Montverde, Reedy Creek, and Oviedo-Winter Springs.

WINTER PARK:

Apopka, East Orange, Lake Buena Vista, Orlando, Oviedo, Sanford, Windermere, Winter Garden, Oviedo-Winter Springs, Reedy Creek, Geneva and Montverde.

TITUSVILLE:

Cocoa and Cocoa Beach.

COCOA:

Cocoa Beach, Eau Gallie, Melbourne and Titusville.

MELBOURNE:

Cocoa, Cocoa Beach, Eau Gallie and Sebastian.

SARASOTA:

Bradenton, Myakka and Venice.

FT. MYERS:

Cape Coral, Ft. Myers Beach, North Cape Coral, North Ft Myers, Pine Island, Lighthouse Acres and Sanibel-Captiva Islands.

NAPLES:

Marco Island and North Naples.

WEST PALM BEACH:

Boynton Beach and Jupiter.

POMPANO BEACH:

Boca Raton, Coral Springs, Deerfield Beach and Ft. Lauderdale.

FT. LAUDERDALE:

Coral Springs, Deerfield Beach, Hollywood and Pompano Beach.

HOLLYWOOD:

Ft Lauderdale and North Dade

NORTH DADE:

Hollywood, Miami and Perrine

MIAMI:


Homestead, North Dade and Perrine.

FirstWorld Communications, Inc. intends to offer service throughout the State of Florida.

ATTACHMENT I

AUTHORITY TO OPERATE IN FLORIDA

State of Florida



Department of State

I certify the attached is a true and correct copy of the application by FIRSTWORLD COMMUNICATIONS, INC., a California corporation, authorized to transact business within the State of Florida on May 4, 1998 as shown by the records of this office.

The document number of this corporation is F98000002542.

Given under my hand and the
Great Seal of the State of Florida
at Tallahassee, the Capitol, this the
Fifth day of May, 1998



CR26022 (2 95)

Sandra W. Northam
Secretary of State

APPLICATION BY FOREIGN CORPORATION FOR AUTHORIZATION TO TRANSACT BUSINESS IN FLORIDA

IN COMPLIANCE WITH SECTION 607.1503, FLORIDA STATUTES, THE FOLLOWING IS SUBMITTED TO REGISTER A FOREIGN CORPORATION TO TRANSACT BUSINESS IN THE STATE OF FLORIDA

1. FirstWorld Communications, Inc.

(Name of corporation; must include the word "INCORPORATED", "COMPANY", "CORPORATION" or words or abbreviations of like import in language as will clearly indicate that it is a corporation instead of a natural person or partnership if not so contained in the name at present.)

2. California 3. 33-0521976

(State or country under the law of which it is incorporated) (FEI number, if applicable)

4. July 16, 1992 5. Perpetual

(Date of incorporation) (Duration: Year corp. will cease to exist or "perpetual")

6. Upon qualification

(Date first transacted business in Florida.) (SEE SECTIONS 607.1501, 607.1502 and 817.155, F.S.)

7. 9333 Genesee Avenue, Suite 200

San Diego, CA 92121

(Current mailing address)

8. Long distance telecommunications services / Fiber optic network design & services provider

(Purpose(s) of corporation authorized in home state or country to be carried out in state of Florida)

9. Name and street address of Florida registered agent: (P O Box or Mail Drop Box NOT acceptable)

Name: NRAI Services, Inc.

Office Address: 526 E. Park Avenue

Tallahassee, Florida, 32301

(Zip code)

FILED
98 MAY -4 AM 9:26
STATE OF FLORIDA
TALLAHASSEE

10. Registered agent's acceptance:

Having been named as registered agent and to accept service of process for the above stated corporation at the place designated in this application, I hereby accept the appointment as registered agent and agree to act in this capacity. I further agree to comply with the provisions of all statutes relative to the proper and complete performance of my duties, and I am familiar with and accept the obligations of my position as registered agent.

Tina Ieland (Registered agent's signature) Assistant Secretary for NRAI Services, Inc.

11. Attached is a certificate of existence duly authenticated, not more than 90 days prior to delivery of this application to the Department of State, by the Secretary of State or other official having custody of corporate records in the jurisdiction under the law of which it is incorporated

12. Names and addresses of officers and/or directors. (Street address ONLY - P.O. Box NOT acceptable)

A. DIRECTORS (Street address only - P.O. Box NOT acceptable)

Chairman: Donald L. Sturm

Address: 3033 E. First Avenue, #200
Denver, CO 80206-5698

Vice Chairman: _____

Address: _____

Director: Melanie Sturm

Address: 5430 Chevy Chase Parkway, NW
Washington, DC 20015

Director: Jim Spitzenberger

Address: 16108 Burt Street
Omaha, NE 68118

B. OFFICERS (Street address only - P.O. Box NOT acceptable)

President: Donald L. Sturm

Address: 3033 E. First Avenue, #200
Denver, CO 80206-5698

Vice President: Robert E. Randall

Address: 4472 Heritage Glen Lane
San Diego, CA 92130

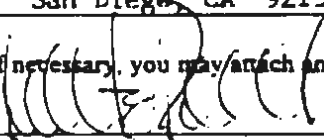
Secretary: Dennis Mulroy

Address: 4370 Mensha Place
San Diego, CA 92130

Treasurer: Dennis Mulroy

Address: 4370 Mensha Place
San Diego, CA 92130

NOTE: If necessary, you may attach an addendum to the application listing additional officers and/or directors

13 
(Signature of Chairman, Vice Chairman, or any officer listed in number 12 of the application)

14 Robert E. Randall, Vice President
(Typed or printed name and capacity of person signing application)

FROM

(MON) 2.24.97 16

T. 16:06/NO. 4860250259 2 3

100701

A503855

ENDORSED
FILED

In the office of the Secretary of State
of the State of California

**CERTIFICATE OF AMENDMENT
OF
AMENDED AND RESTATED ARTICLES OF INCORPORATION**

JAN 29 1998

Robert Randall and Dennis Mulroy certify that:

Bill Jones
BILL JONES, Secretary of State

1. They are the Executive Vice President and Secretary, respectively, of SPECTRANET INTERNATIONAL, a California corporation (the "Corporation").

2. Article I. of the amended and restated articles of incorporation of the Corporation is amended to read as follows:

*I

The name of this Corporation is FirstWorld Communications, Inc. *

3. The foregoing amendment of articles of incorporation has been duly approved by the board of directors.

4. The foregoing amendments of articles of incorporation has been duly approved by the required vote of shareholders in accordance with Section 902 of the Corporations Code. The total number of outstanding shares of the corporation is 19,313,789. The number of shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50%.

We further declare under penalty of perjury under the laws of the State of California that the matters set forth in this certificate are true and correct of our own knowledge.

Date: January 22, 1998

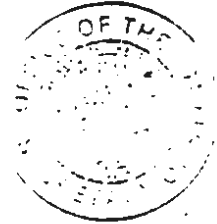
Robert Randall
Robert Randall
Executive Vice President

Dennis M. Mulroy
Dennis Mulroy
Secretary



State of California

SECRETARY OF STATE



I, *BILL JONES*, Secretary of State of the State of California, hereby certify:

That the attached transcript has been compared with the record on file in this office, of which it purports to be a copy, and that it is full, true and correct.

IN WITNESS WHEREOF, I execute this certificate and affix the Great Seal of the State of California this

JAN 12 1998



Secretary of State

DEC 30 1997

BILL JONES, Secretary of State

**AMENDED AND RESTATED
ARTICLES OF INCORPORATION
OF SPECTRANET INTERNATIONAL**

The undersigned, G. Bradford Saunders and Robert Cerasoli, hereby certify that:

1. They are the Senior Vice President and Secretary, respectively, of SPECTRANET INTERNATIONAL, a California corporation.
2. The Articles of Incorporation of this Corporation are amended and restated in their entirety to read as follows:

"I.

The name of this Corporation is SPECTRANET INTERNATIONAL.

II.

The purpose of this Corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of California other than the following: (i) the exploration, development and/or production of oil, natural gas and/or other minerals; (ii) the transportation, gathering, processing, storage, distribution, marketing and/or sale of oil, natural gas, liquids and/or any other hydrocarbons or hydrocarbon products; (iii) the generation, transmission, distribution, marketing and/or sale of electricity; (iv) the transportation, distribution, marketing and/or sale of water; (v) the business of trading in any type of commodity, whether or not on an exchange and whether or not through price swaps, options, futures contracts and/or other derivative products; (vi) the provision of services or equipment (other than communications or telecommunications equipment and/or services) incident to any of the foregoing businesses; (vii) the financing of or investment in any of the foregoing businesses; or (viii) the banking business, the trust company business, or the practice of a profession permitted to be incorporated by the California Corporations Code.

III.

(a) This Corporation is authorized to issue two classes of shares, designated "Common Stock" and "Preferred Stock." The total number of shares which this Corporation shall have authority to issue is 110,000,000. The number of shares of Common Stock authorized to be issued is 100,000,000, of which 10,135,164 shall be designated Series A Common Stock and 89,864,836 shall be designated Series B Common Stock. The number of shares of Preferred Stock authorized to be issued is 10,000,000.

(b) The Preferred Stock may be issued from time to time in one or more series. The Board of Directors of this Corporation is hereby authorized within the restrictions stated in these Amended and Restated Articles of Incorporation to fix the number of shares of each such series and determine the designation thereof and to (i) determine or alter the rights, preferences and

restrictions imposed upon any wholly unissued series of Preferred Stock and (ii) increase or decrease the number of shares of that series, but not below the number of shares of any series then outstanding. In case the number of shares of any series shall be so decreased, the shares constituting such decrease shall resume the status which they had prior to the adoption of the resolution originally fixing the number of shares of such series.

(c) Upon the filing of these Amended and Restated Articles of Incorporation, each share of Common Stock outstanding immediately prior to such filing shall be reclassified as one share of Series B Common Stock.

IV.

The express terms and conditions of the Common Stock are as follows:

1. Voting Rights

(a) Series A Common Stock. Each holder of shares of Series A Common Stock shall be entitled to ten votes per share of Series A Common Stock held by such holder; and

(b) Series B Common Stock. Each holder of shares of Series B Common Stock shall be entitled to one vote per share of Series B Common Stock held by such holder; and

(c) Election of Directors. From and after July 1, 1998, the holders of Series B Common Stock shall be entitled, voting as a separate class, to elect one (1) director of the Corporation at each election of directors. Any vacancy occurring because of the death, resignation or removal of a director elected by holders of Series B Common Stock shall be filled by the vote or written consent of the holders of a majority of the shares of Series B Common Stock or, in the absence of such action by such holders, by action of the remaining directors then in office. All directors not elected as provided above shall be elected by the holders of Series A Common Stock and Series B Common Stock, voting together and not as separate classes, with each share voting as provided in this Article IV, Section 1. Any vacancy with respect to such directors shall be filled as provided in the Bylaws of the Corporation.

2. Conversion

(a) Right to Convert. Each holder of Series A Common Stock shall have the right to convert each share of Series A Common Stock held by such holder into one fully paid and non-assessable share of Series B Common Stock in accordance with this Article IV, Section 2.

(b) Mechanics of Voluntary Conversion. In order to exercise the conversion privilege, the holder of any shares of Series A Common Stock to be converted shall present and surrender the certificate or certificates representing such shares during usual business hours at the office or agency maintained by the Corporation for the transfer of Series A Common Stock and shall give written notice to the Corporation at such office or agency that the holder elects to convert the shares of Series A Common Stock represented by such certificate or certificates, to

the extent specified in such notice. Such notice shall also state the name or names (with addresses) in which the certificate or certificates for shares of Series B Common Stock which shall be issuable on such conversion shall be issued. If required by the Corporation, any certificate for shares of Series A Common Stock surrendered for conversion shall be accompanied by instruments of transfer, in form satisfactory to the Corporation, duly executed by the holder of such shares or his or her duly authorized representative. As promptly as practicable after the receipt of such notice and the surrender of the certificate or certificates representing such shares of Series A Common Stock as aforesaid, the Corporation shall issue and deliver at such office or agency to such holder, or on his or her written order, a certificate or certificates for the number of full shares of Series B Common Stock issuable upon the conversion of such shares. Each conversion of shares of Series A Common Stock shall be deemed to have been effected on the date on which such notice shall have been received by the office or agency maintained by the Corporation for such purpose and the certificate or certificates representing such shares shall have been surrendered (subject to receipt by such office or agency within thirty (30) days thereafter of any required instruments of transfer as aforesaid), and the person or persons in whose name or names any certificate or certificates for shares of Series B Common Stock shall be issuable upon such conversion shall be deemed to have become on said date the holder or holders of record of the shares represented thereby.

(c) Automatic Conversion. Each share of Series A Common Stock shall be converted automatically into one share of Series B Common Stock upon the sale or transfer of such share of Series A Common Stock (other than the original sale and issuance by the Corporation) to any person or entity other than a Permitted Transferee (as defined below), an Affiliate (as defined below) of Donald L. Sturm or an Affiliate of Enron Capital & Trade Resources Corp. or, with respect to shares of Series A Common Stock held by Colorado Spectra 3, LLC, upon the transfer of a controlling interest in Colorado Spectra 3, LLC to any person or entity other than Enron Capital & Trade Resources Corp., Donald L. Sturm, a Permitted Transferee or one of their Affiliates. A "Permitted Transferee" shall mean a natural person who is qualified as an accredited investor under applicable securities laws and who is a member, manager or officer of Colorado Spectra 3, LLC or an Affiliate of any such member, manager or officer. An "Affiliate" of an entity or natural person shall mean (i) an entity or natural person which or who, directly or indirectly, controls, is controlled by, or is under common control with such entity or natural person and (ii), as applied to a natural person, said person, a member of said person's Immediate Family, or the personal representative of such person. "Immediate Family" shall mean a natural person's spouse, child, grandchild, parent, grandparent, or sibling.

V

(a) The liability of the directors of this Corporation for monetary damages shall be eliminated to the fullest extent permissible under California law.

(b) This Corporation is authorized to provide indemnification of agents (as defined in Section 317 of the California Corporations Code) through bylaw provisions, agreements with agents, vote of shareholders or disinterested directors or otherwise, in excess of the indemnification otherwise permitted by Section 317 of the California Corporations Code, subject

only to applicable limits set forth in Section 204 of the California Corporations Code with respect to actions for breach of duty to the Corporation and its shareholders.

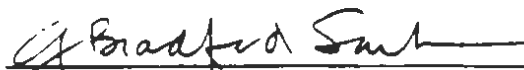
(c) Any repeal or modification of this Article V shall be prospective and shall not affect the rights of indemnification or limitation of liability in effect at the time of the alleged occurrence of any act or omission to act giving rise to liability or indemnification."

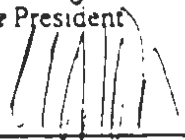
3. The foregoing Amended and Restated Articles of Incorporation have been duly approved by the Board of Directors.

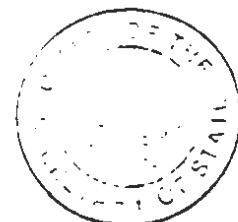
4. The foregoing Amended and Restated Articles of Incorporation have been duly approved by the required vote of shareholders in accordance with Section 902 and 903 of the Corporations Code. The total number of outstanding shares of the Corporation is 9,178,625 shares of Common Stock. The Corporation has no other class of securities outstanding. The number of shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50% of the Common Stock.

The undersigned declares under penalty of perjury that the matters set forth in the foregoing certificate are true of his own knowledge.

IN WITNESS WHEREOF, the undersigned has executed this certificate in San Diego California, this 30 day of December, 1997.


G. BRADFORD SAUNDERS
Senior Vice President


ROBERT CERASOLI
Secretary



1809033

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AMENDED AND RESTATED ARTICLES OF INCORPORATION FILED *BJM*

in the office of the Secretary of State
of the State of California

OF

SPECTRANET INTERNATIONAL

DEC 30 1998

Bill Jones
BILL JONES, Secretary of State

The undersigned, Renney E. Senn and Judith M. O'Brien, hereby certify that

- 1 They are the duly elected President and Assistant Secretary, respectively, of the corporation
- 2 The articles of incorporation of the corporation shall be amended and restated to read in full as follows

"ONE. The name of this corporation is SpectraNet International

TWO The purpose of this corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of California other than the banking business, the trust company business, or the practice of a profession permitted to be incorporated by the California Corporations Code

THREE This corporation is authorized to issue two (2) classes of stock to be designated, respectively, "Common Stock" and "Preferred Stock." The total numbers of shares which the corporation is authorized to issue is 20,160,335 shares. 15,000,000 shares shall be Common Stock and 5,160,335 shares shall be Preferred Stock, of which 134,200 shares are designated Series A Preferred Stock (the "Series A"), 2,426,135 shares are designated Series B Preferred Stock (the "Series B"), and 2,600,000 shares are designated Series C Preferred Stock (the "Series C")

FOUR The rights, preferences, privileges and restrictions granted to or imposed upon the Common Stock and Preferred Stock are as follows

1 Dividend Provisions

a Series C From the date of issuance (the "Original Issue Date") until December 31, 1998, the holders of the Series C in preference to the holders of any other stock of the corporation, shall be entitled to receive dividends at the rate of \$0.40 per share (as adjusted for any stock dividends, combinations or splits with respect to such shares) per annum payable out of funds legally available therefor. Such dividends shall be payable only when, as and if declared by the Board of Directors and shall be non-cumulative, provided, however, that after December 31, 1998, the holders of the Series C shall be entitled to receive cumulative dividends at the rate of \$0.40 per share (as adjusted for any stock dividends, combinations or splits with respect to such shares) per annum, payable out of funds legally available therefor. Such cumulative dividends shall be payable only when, as and if declared by the Board of Directors and shall accrue after December 31, 1998, whether or not earned.

So long as any shares of the Series C shall be outstanding, no dividends (other than those payable solely in the Common Stock of the corporation) shall be paid on the Series A, the Series B or

the Common Stock of the corporation during any fiscal year of the corporation, nor shall any other distribution be made on the Series A, the Series B or the Common Stock nor shall any shares of the Series A, the Series B or the Common Stock be purchased, redeemed, or otherwise acquired for value by the corporation (except for acquisitions of Common Stock by the corporation pursuant to agreements which permit the corporation to repurchase such shares) until dividends in the total amount of \$0.40 per share (as adjusted for any stock dividends, combinations or splits with respect to such shares) shall have first been paid or declared and set apart during that fiscal year (and any prior year in which dividends accumulated but remain unpaid) on the Series C.

b. Series A. The holders of the Series A shall be entitled to receive cumulative dividends at the rate of \$0.20 per share (as adjusted for any stock dividends, combinations or splits with respect to such shares) per annum, when, as and if declared by the Board of Directors. Such dividends shall accrue from the date of issuance of the Series A, whether or not earned.

So long as any shares of the Series A shall be outstanding, no dividends (other than those payable solely in the Common Stock of the corporation) shall be paid on any Series B or Common Stock of the corporation during any fiscal year of the corporation nor shall any other distribution be made on any Series B or Common Stock nor shall any shares of Series B or Common Stock be purchased, redeemed, or otherwise acquired for value by the corporation (except for acquisitions of Common Stock by the corporation pursuant to agreements which permit the corporation to repurchase such shares) until dividends in the total amount of \$0.20 per share (as adjusted for any stock dividends, combinations or splits with respect to such shares) shall have then been paid or declared and set apart during that fiscal year (and any prior year in which dividends accumulated but remain unpaid) on the Series A.

c. Series B and Common Stock. No dividends (other than those payable solely in the Common Stock of the corporation) shall be paid on any share of Series B or Common Stock during any fiscal year of the corporation until dividends in the total amount set forth in subsections 1.a. and b. above shall have been paid or declared and set apart during that fiscal year (and any prior year in which dividends accumulated but remain unpaid) and no dividends shall be paid on any share of Common Stock unless a dividend is paid with respect to all outstanding shares of Series B equal to the aggregate amount of such dividends for all shares of Common Stock into which each such share of Series B could then be converted.

2. Liquidation Preference

a. Series B and Series C Liquidation Preference. In the event of any liquidation, dissolution or winding up of the corporation, whether voluntary or involuntary (a "Liquidation Event"), the holders of the Series B and Series C shall be entitled to receive, on a pari-passu basis, prior and in preference to any distribution of any of the assets or surplus funds of the corporation to the holders of the Series A and Common Stock by reason of their ownership thereof, the following amounts (in each case adjusted for any stock dividends, combinations or splits with respect to such shares): (i) with respect to the Series B, \$1.00 per share plus an amount equal to \$0.09 per share per year for such full year following July 1, 1995; and (ii) with respect to the Series C, \$5.00 per share, plus all accumulated or declared but unpaid dividends for each share of Series C then held by them. If, upon the occurrence of a Liquidation Event, the assets and funds thus distributed among the holders of the Series B and Series

C shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then the entire assets and funds of the corporation legally available for distribution shall be distributed ratably among the holders of the Series B and Series C in proportion to the preferential amount each such holder is otherwise entitled to receive

b. After payment to the holders of the Series B and Series C of the amounts set forth in subsection 2 a. above, the entire remaining assets and funds of the corporation legally available for distribution, if any, shall be distributed among the holders of the Common Stock and the Series B and Series C in proportion to the shares of Common Stock then held by them and the shares of Common Stock which they then have the right to acquire upon conversion of the shares of Series B and Series C then held by them; provided, however, that the respective liquidation amount of the Series B and Series C under this subsection 2 b. shall not exceed (a) 200% of such series' Original Issue Price (as defined in subsection 4 a.), if such Liquidation Event occurs on or before December 31, 1998; (b) 250% of such series' Original Issue Price if such Liquidation Event occurs after December 31, 1998 and on or prior to December 31, 1999; (c) 300% of such series' Original Issue Price if such Liquidation Event occurs after December 31, 1999 and on or prior to December 31, 2000, or (d) 350% of such series' Original Issue Price if such Liquidation Event occurs after December 31, 2000, provided that for such purposes the Original Issue Price shall be adjusted for any stock dividends, combinations or splits with respect to such shares

c. In the event of a Liquidation Event, the holders of the Series A shall not be entitled to receive any of the assets and funds of the corporation

d. A consolidation or merger of this corporation with or into any other corporation or corporations or the sale of all or substantially all of the assets of this corporation (other than a merger solely to change the domicile of the corporation, or any transaction where the shareholders of the corporation immediately prior to such transaction hold more than 50% of the outstanding equity securities of the entity surviving such merger or consolidation or the entity purchasing such assets), shall be deemed to be a liquidation, dissolution or winding up and a Liquidation Event within the meaning of this Section 2.

e. As authorized by Section 402.5(c) of the California Corporations Code, the provisions of Sections 502 and 503 of the California Corporations Code shall not apply with respect to repurchases by the corporation of shares of Common Stock issued to or held by employees, officers, directors or consultants of the corporation or its subsidiaries upon termination of their employment or services pursuant to an agreement providing for the right of such repurchase

3. Redemption The Preferred Stock shall not be redeemable

4. Conversion The holders of the Preferred Stock shall have conversion rights as follows (the "Conversion Rights")

a. Right to Convert Each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the date of issuance of such share, at the office of this corporation or any transfer agent for the Preferred Stock, into such number of fully paid and nonassessable shares of

Common Stock as is determined by dividing its "Original Issue Price" (\$3.33, \$2.50 and \$5.00 for the Series A, the Series B and the Series C, respectively) by the then effective conversion price, as last adjusted and then currently in effect (the "Conversion Price"). The initial Conversion Price per share at which shares of Common Stock shall be issuable upon conversion of shares of the Preferred Stock after the date hereof shall be \$33.30, \$2.50 and \$5.00 for the Series A, the Series B and the Series C, respectively, provided, however, that such Conversion Prices shall be subject to adjustment as set forth in subsections d and e of this Section 4.

b Automatic Conversion

(i) Each share of Series A Preferred Stock shall be converted automatically into shares of Common Stock (at the then effective Conversion Price) immediately upon the affirmative vote of the holders of a majority of the shares of such series outstanding at the time of such vote, and each share of Series B Preferred Stock shall be converted automatically into shares of Common Stock (at the then effective Conversion Price) immediately upon the affirmative vote of the holders of a majority of the shares of such series outstanding at the time of such vote; and each share of Series C Preferred Stock shall be converted automatically into shares of Common Stock (at the then effective Conversion Price) immediately upon the affirmative vote of the holders of a majority of the shares of such series outstanding at the time of such vote.

(ii) Each share of Preferred Stock shall be converted automatically into shares of Common Stock (at the then effective Conversion Price) immediately upon the closing of the issuance of shares following the effectiveness of a registration statement under the Securities Act of 1933, as amended, (other than a registration statement relating solely to the sale of securities to employees of the corporation or a registration relating solely to a Securities and Exchange Commission Rule 145 transaction), pursuant to a firm commitment underwriting and covering the offer and sale of this corporation's Common Stock which satisfies the following applicable requirements: (1) an aggregate offering price of at least \$20,000,000, and (2) the per share offering price (prior to underwriter discounts, commissions and expenses) is not less than (A) 200% of the Original Issue Price of the Series C for an offering which occurs prior to December 31, 1998, (B) 250% of the Original Issue Price of the Series C for an offering which occurs after December 31, 1998 and on or prior to December 31, 1999, (C) 300% of the Original Issue Price of the Series C for an offering which occurs after December 31, 1999 and on or prior to December 31, 2000, or (D) 350% of the Original Issue Price of the Series C for an offering which occurs after December 31, 2000, provided that for such purposes the Original Issue Price shall be adjusted for any stock dividends, combinations or splits with respect to such shares.

c Mechanics of Conversion Before any holder of Preferred Stock shall be entitled to convert the same into shares of Common Stock pursuant to subsection 4 a. above, he shall surrender the certificate or certificates therefor, duly endorsed, at the office of this corporation or of any transfer agent for the Preferred Stock, and shall give written notice to this corporation at its principal corporate office, of the election to convert the same and shall state therein the name or names in which the certificate or certificates for shares of Common Stock are to be issued. This corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder of Preferred Stock, or to the nominee or nominees of such holder, a certificate or certificates for the number of shares of Common Stock to which such holder shall be entitled as aforesaid. Such conversion shall be deemed to have been

made immediately prior to the close of business on the date of such surrender of the shares of Preferred Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock on such date.

d. Adjustments to Conversion Price of Series C for Diluting Issues

i. Special Definitions For purposes of this subsection 4 d, the following definitions shall apply:

(a) Options shall mean rights, options or warrants to subscribe for purchase or otherwise acquire either Common Stock or Convertible Securities.

(b) Original Issue Date shall mean the date on which the first share of the Series C was issued.

(c) Convertible Securities shall mean any evidences of indebtedness, shares (other than the Series C) or other securities convertible into or exchangeable for Common Stock.

(d) Additional Shares of Common Stock shall mean all shares of Common Stock issued (or pursuant to subsection 4 d iii, deemed to be issued) by the corporation after the Original Issue Date, other than shares of Common Stock issued or issuable at any time:

(i) upon conversion of Series A, Series B or Series C Preferred Stock into Common Stock;

(ii) to officers, directors, and employees of, and consultants to, the corporation pursuant to plans, arrangements or agreements approved by the Board of Directors (including the approval by the Director elected by the Series C pursuant to subsection 5 b hereof, but if no such director is then serving, by the unanimous approval of the Board of Directors);

(iii) to officers, directors, and employees of, and consultants to, the corporation pursuant to the corporation's incentive stock option plans as in effect on the Original Issue Date;

(iv) upon exercise of outstanding warrants issued to holders of Series B prior to the Original Issue Date;

(v) to J.P. Morgan [full name] pursuant to that certain letter agreement between J.P. Morgan and the corporation dated November 5, 1996;

(vi) to financial advisors pursuant to outstanding arrangements or arrangements approved by the corporation's Board of Directors (including the approval by the Director elected by the Series C pursuant to subsection 5 b hereof, but if no such director is then serving, by the unanimous approval of the Board of Directors).

(vii) as a dividend or distribution on Preferred Stock.

(viii) the issuance of shares of Common Stock or Preferred Stock or options or warrants to purchase shares of Common Stock or Preferred Stock convertible into shares of Common Stock in conjunction with equipment leases or other commercial financing transactions approved by the corporation's Board of Directors (including the approval by the Director elected by the Series C pursuant to subsection 5 b), but if no such director is then serving, by unanimous approval of the Board of Directors) and the issuance of stock upon exercise of any such warrants or options.

(ix) the issuance of shares of the corporation's equity securities in connection with (a) the consolidation or merger of this corporation with or into any other entity or entities, (b) the acquisition of securities of any other entity or entities in a transaction in which the corporation acquires a majority of the outstanding securities of such other entity or entities, (c) the purchase of all or substantially all of the assets of any other entity or entities, provided that any of the foregoing shall have been approved by the corporation's Board of Directors (including the approval by the Director elected by the Series C pursuant to subsection 5 b), but if no such director is then serving, by unanimous approval of the Board of Directors).

(x) by way of a dividend or other distribution on shares of Common Stock excluded from the definition of Additional Shares of Common Stock by the foregoing clauses.

ii No Adjustment of Conversion Price No adjustment in the then applicable Conversion Price of a share of Series C shall be made in respect of the issuance of Additional Shares of Common Stock unless the consideration per share for an Additional Share of Common Stock issued or deemed to be issued by the corporation is less than the respective Conversion Price in effect on the date of, and immediately prior to such issue, for such share of Series C.

iii Deemed Issue of Additional Shares of Common Stock Except as otherwise provided in subsection 4 d i), in the event that after the Original Issue Date the corporation at any time or from time to time shall issue any Options or Convertible Securities or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares (as set forth in the instrument relating thereto without regard to any provisions contained therein for a subsequent adjustment of such number) of Common Stock issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date, provided that Additional Shares of Common Stock shall not be deemed to have been issued unless the consideration per share (determined pursuant to subsection 4 d v) hereof) of such Additional Shares of Common Stock would be less than the then applicable Conversion Price of Series C in effect on the date of and immediately prior to such issue or such record date, as the case may be, and provided further that in any such case in which Additional Shares of Common Stock are deemed to be issued

(a) no further adjustment in the Conversion Price shall be made upon the subsequent issue of Convertible Securities or shares of Common Stock upon the exercise of such Options or upon the conversion or exchange of such Convertible Securities.

(b) if such Options or Convertible Securities by their terms provide, with the passage of time or otherwise, for any increase in the consideration payable to the corporation, or decrease in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, the Conversion Price computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon, shall, upon any such increase or decrease becoming effective, be recomputed to reflect such increase or decrease insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities.

(c) upon the expiration of any such Options or any rights of conversion or exchange under such Convertible Securities which shall not have been exercised, the Conversion Price computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto) and any subsequent adjustments based thereon, shall, upon such expiration be recomputed as if

(i) in the case of Convertible Securities or Options for Common Stock, the only Additional Shares of Common Stock issued were shares of Common Stock, if any, actually issued upon the exercise of such Options or the conversion or exchange of such Convertible Securities and the consideration received therefor was the consideration actually received by the corporation for the issue of all such Options, whether or not exercised, plus the consideration actually received by the corporation upon such exercise, or for the issue of all such Convertible Securities which were actually converted or exchanged, plus the additional consideration, if any, actually received by the corporation upon such conversion or exchange, and

(ii) in the case of Options for Convertible Securities only the Convertible Securities, if any, actually issued upon the exercise thereof were issued at the time of issue of such Options and the consideration received by the corporation for the Additional Shares of Common Stock deemed to have been then issued was the consideration actually received by the corporation for the issue of all such Options, whether or not exercised, plus the consideration deemed to have been received by the corporation upon the issue of the Convertible Securities with respect to which such Options were actually exercised.

(d) no readjustment pursuant to subsections 4 d.iii.(b) or (c) above shall have the effect of increasing the Conversion Price to an amount which is greater than the Conversion Price on the original adjustment date, and

(e) in the case of any Options which expire by their terms not more than 30 days after the date of issue thereof, no adjustment of the Conversion Price shall be made until the expiration or exercise of all such Options

iv. Adjustment of Conversion Price of Series C Upon Issuance of Additional Shares of Common Stock In the event this corporation shall issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to subsection 4 d iii.) without consideration or for a consideration per share less than the Conversion Price of the Series C in effect on the date of and immediately prior to such issue, then and in such event, the then applicable Series C Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock which the aggregate consideration received by the corporation for the total number of Additional Shares of Common Stock so issued (or deemed to be issued) would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common Stock so issued (or deemed to be issued), and provided further that, for the purposes of this subsection 4 d iv. all shares of Common Stock issuable upon conversion of outstanding Options, Convertible Securities and the Preferred Stock (excluding Common Stock issuable on exercise of Options granted pursuant to any of the corporation's incentive stock option plans and excluding Common Stock issuable upon conversion of the Series C Preferred) shall be deemed to be outstanding, and immediately after any Additional Shares of Common Stock are deemed issued pursuant to subsection 4 d iii., such Additional Shares of Common Stock shall be deemed to be outstanding.

v. Determination of Consideration For purposes of this subsection 4 d. the consideration received by the corporation for the issue of any Additional Shares of Common Stock shall be computed as follows:

(a) Cash and Property Such consideration shall

(i) insofar as it consists of cash, be computed at the aggregate amount of cash received by the corporation excluding amounts paid or payable for accrued interest or accrued dividends;

(ii) insofar as it consists of property other than cash, be computed at the fair value thereof at the time of such issue, as determined in good faith by the Board of Directors; and

(iii) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (i) and (ii) above, as determined in good faith by the Board of Directors;

(b) Options and Convertible Securities The consideration per share received by the corporation for Additional Shares of Common Stock deemed to have been issued pursuant to subsection 4 d iii. relating to Options and Convertible Securities shall be determined by dividing

(i) the total amount, if any, received or receivable by the corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by

(ii) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities

e. Adjustments to Conversion Price of Series A, Series B and Series C for Certain Other Events

i. Adjustments for Subdivisions, Combinations or Consolidation of Common Stock In the event the outstanding shares of Common Stock shall be subdivided (by stock split, stock dividend, or otherwise), into a greater number of shares of Common Stock, the Conversion Price for the Series A, Series B and Series C then in effect shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, the Conversion Price for the Series A, Series B and Series C then in effect shall, concurrently with the effectiveness of such combination or consolidation, be proportionately increased.

ii. Adjustments for Other Distributions In the event the corporation at any time or from time to time makes, or fixes a record date for the determination of holders of Common Stock entitled to receive any distribution payable in securities of the corporation other than shares of Common Stock and other than as otherwise adjusted in this Section 4, then and in each such event provision shall be made so that the holders of Preferred Stock shall receive upon conversion thereof, in addition to the number of shares of Common Stock receivable thereupon, the amount of securities of the corporation which they would have received had their respective Preferred Stock been converted into Common Stock on the date of such event and had they thereafter, during the period from the date of such event to and including the date of conversion, retained such securities receivable by them as aforesaid during such period, subject to all other adjustments called for during such period under this Section 4 with respect to the rights of the holders of the Preferred Stock.

iii. Adjustments for Reclassification, Exchange and Substitution If the Common Stock issuable upon conversion of any series of the Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for above), the Conversion Price then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted such that the respective Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders would otherwise have been entitled to receive, a number of shares of such other class or classes of stock.

equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the respective Preferred Stock immediately before that change.

f. No Impairment. This corporation will not, by amendment of its Articles of Incorporation or through any reorganization, recapitalization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by this corporation, but will at all times in good faith assist in the carrying out of all the provisions of this Section 4 and in the taking of all such action as may be necessary or appropriate in order to protect the Conversion Rights of the holders of the Preferred Stock against impairment.

g. No Fractional Shares and Certificate as to Adjustments

i. No fractional shares shall be issuable upon conversion of any share or shares of Preferred Stock, and the number of shares of Common Stock to be issued shall be rounded down to the nearest whole share. If any fractional interest in a share of Common Stock would, except for the provisions of this subsection (g), be deliverable upon conversion of the Preferred Stock then being converted by a shareholder, this corporation shall pay to the holders of such converted stock an amount in cash equal to the current market value of such fractional interest, as determined by the Board of Directors.

ii. Upon the occurrence of each adjustment or readjustment of the Conversion Price pursuant to this Section 4, this corporation, at its expense, shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Preferred Stock a certificate of its Chief Financial Officer setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. This corporation shall, upon the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (A) such adjustment and readjustment; (B) the Conversion Price at the time in effect; and (C) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of Preferred Stock.

h. Notices of Record Date. In the event of any taking by this corporation of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend (other than a cash dividend) or other distribution, any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right, this corporation shall mail to each holder of Preferred Stock, at least ten (10) days prior to the date specified therein, a notice specifying the date on which any such record is to be taken for the purpose of such dividend, distribution or right, and the amount and character of such dividend, distribution or right.

i. Reservation of Stock Issuable Upon Conversion. This corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock solely for the purpose of effecting the conversion of the shares of the Preferred Stock such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the Preferred Stock, and if at any time the number of authorized but unissued shares of Common Stock

shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock this corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose

J Notices Any notice required by the provisions of this Section 4 to be given to the holders of shares of Preferred Stock shall be deemed given three (3) days after deposit in the United States first class, certified or registered mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of this corporation

5 Voting Rights

a Vote Other than for Directors Except as otherwise required by law or as provided in subsections 5.b and 6 hereof, each share of Common Stock issued and outstanding shall have one vote and the holder of each share of Series B and Series C shall be entitled to the number of votes equal to the number of shares of Common Stock into which such respective share of Series B and Series C could be converted at the record date for determination of the shareholders entitled to vote on such matters, or, if no such record date is established, at the date such vote is taken or any written consent of shareholders is solicited, such votes to be counted together with all other shares of stock of the corporation having general voting power and not separately as a class. Holders of Common Stock and Series B and Series C shall be entitled to notice of any shareholders meeting in accordance with the Bylaws of the corporation. All holders of Series B and Series C shall be entitled to vote on all matters upon which the holders of Common Stock are entitled to vote. Fractional votes by the holders of Preferred Stock shall not, however, be permitted and any fractional voting rights shall (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted) be rounded to the nearest whole number

b Voting for Directors For so long as Four Hundred Forty Thousand (440,000) shares of Series C shall be outstanding (as adjusted for stock dividends, combinations or splits with respect to such shares), the holders of shares of Series C, voting as a separate class, shall be entitled to elect one director. Additional directors shall be elected by the holders of the Series B, Series C and Common Stock, voting together as a class in accordance with the provisions of subsection 5.a. above. Any vacancy in the Board of Directors occurring because of the death, resignation or removal of a director elected by the holders of Series C voting as a class shall be filled by the vote or written consent of the holders of a majority of the class which elected such director. Any vacancy occurring because of the death, resignation or removal of a director elected by the vote of both the Common Stock and the Series B and Series C shall be filled by the vote or written consent of the holders of the Series B and Series C and the Common Stock voting as provided in subsection 5.a. or, in the absence of action by such holders of Preferred Stock and Common Stock, by action of the remaining directors then in office. A director may be removed from the Board of Directors with or without cause only by the vote or consent of the holders of the outstanding class with voting power entitled to elect him in accordance with the California Corporations Code and the vacancy created thereby may be filled only by the vote or consent of such holders

6 Covenants

a. In addition to any other rights provided by law, this corporation shall not, without first obtaining the affirmative vote or written consent of the holders of not less than a majority of the outstanding shares of Series A, voting separately as a class, take any action that would change the preferences, rights, privileges or powers of, or the restrictions provided for the benefit of, the Series A.

b. In addition to any other rights provided by law, this corporation shall not, without first obtaining the affirmative vote or written consent of the holders of not less than a majority of the outstanding shares of Series B, voting separately as a class, take any action that would change the preferences, rights, privileges or powers of, or the restrictions provided for the benefit of, the Series B.

c. In addition to any other rights provided by law, this corporation shall not, without first obtaining the affirmative vote or written consent of the holders of not less than sixty-six and two-thirds percent (66 2/3%) of the outstanding shares of Series C, voting separately as a class

i. pay or declare any dividend on the Common Stock (other than dividends payable solely in Common Stock of this corporation) or repurchase any shares of capital stock of the corporation (other than repurchases from employees and consultants under restricted stock purchase agreements) (a) in effect prior to the Original Issue Date, (b) pursuant to the corporation's incentive stock option plans or (c) pursuant to any other arrangement approved by the corporation's Board of Directors (including the Director elected by the Series C pursuant to subsection 5 b) but if no such director is then serving, by unanimous approval of the Board of Directors).

ii. take any action (including amending or repealing any provision of, or adding any provision to, this corporation's Articles of Incorporation or Bylaws) if such action would increase or decrease the authorized preferred stock of the corporation, or would materially and adversely change the preferences, rights, privileges or powers of, or the restrictions provided for the benefit of, the Series C.

iii. create, authorize, issue or obligate itself to issue shares of any equity security, including securities exercisable into equity securities, having any preference or priority equal to or superior to any preference, priority, right, privilege or power of the Series C, or

iv. effect a merger or consolidation of the corporation with or into any other corporation or corporations or a sale, lease or other disposition of all or substantially all of the assets of the corporation unless (a) the shareholders of the corporation immediately prior to such transaction hold more than 50% of the outstanding equity securities of the entity surviving such merger or consolidation or the entity purchasing such assets, or (b) the amount which each share of Series C Preferred would receive as a result of such merger, consolidation or sale is less than the maximum then-current liquidation preference payable upon a Liquidation Event for each share of Series C set forth in Section 2 above.

7. Status of Converted Stock. In case any shares of Preferred Stock shall be converted pursuant to Section 4 hereof, the shares so converted shall be canceled and shall not be reissuable.

FIVE

1 Limitation of Directors' Liability The liability of the directors of the corporation for monetary damages shall be eliminated to the fullest extent permissible under California law

2 Indemnification of Corporate Agents The corporation is authorized to provide indemnification of agents (as defined in Section 317 of the California Corporations Code) through bylaw provisions, agreements with agents, votes of shareholders or disinterested directors or otherwise, in excess of the indemnification otherwise permitted by Section 317 of the California Corporations Code, subject only to the applicable limits set forth in Section 204 of the California Corporations Code with respect to actions for breach of duty to the corporation and its shareholders

3 Repeal or Modification Any repeal or modification of the foregoing provisions of this Article FIVE shall not adversely affect any right of indemnification or limitation of liability of an agent of this corporation relating to acts or omissions occurring prior to such repeal or modification

3 The foregoing Amended and Restated Articles of Incorporation have been duly approved by the Board of Directors

4 The foregoing Amended and Restated Articles of Incorporation has been duly approved by the required vote of shareholders in accordance with Sections 902 and 903 of the California Corporations Code. The total number of outstanding shares of Common Stock of the corporation is 2,910,000. The total number of outstanding shares of Preferred Stock outstanding are 134,200 shares of Series A Preferred and 2,286,640 shares of Series B Preferred. The number of shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50% of the outstanding shares of the Common Stock, more than 50% of the outstanding shares of Series A Preferred Stock and more than 50% of the outstanding shares of Series B Preferred Stock, each voting as a separate class

We further declare under penalty of perjury that the matters set forth in the foregoing certificate are true and correct of our own knowledge

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Executed at San Diego California, this 19th
day of December, 1996



Renney E. Senn, President



Judith Mayer O'Brien, Assistant Secretary

State of California



SECRETARY OF STATE

CORPORATION DIVISION

I, *BILL JONES*, Secretary of State of the State of California, hereby certify:

That the annexed transcript has been compared with the corporate record on file in this office, of which it purports to be a copy, and that same is full, true and correct.

IN WITNESS WHEREOF, I execute this certificate and affix the Great Seal of the State of California this

SEP 30 1996



Bill Jones

Secretary of State

ENDORSED
FILED
the office of the Secretary of State
of the State of California

SEP 27 1996

Bill Jones
BILL JONES, Secretary of State

**CERTIFICATE OF AMENDMENT TO THE
CERTIFICATE OF DETERMINATION
OF PREFERENCES OF PREFERRED STOCK
SERIES B OF
SPECTRANET INTERNATIONAL**

Renney E. Senn and Judith M. O'Brien, the President and Assistant Secretary, respectively of SpectraNet International, a California corporation (the "Company") and, in accordance with the provisions of Section 401(d) of the California Corporations Code, do certify as follows:

1. That Renney E. Senn and Judith M. O'Brien are the duly elected and acting President and Assistant Secretary, respectively, of the Company;
2. That pursuant to the authority conferred upon the Board of Directors under Article IV of the Company's Articles of Incorporation, the Board of Directors adopted the following resolutions on May 31, 1996:

WHEREAS, the Articles of Incorporation of the Company provide for a class of authorized stock known as preferred stock ("Preferred Stock") consisting of 10,000,000 shares, issuable from time to time in one or more series, and

WHEREAS, pursuant to the authority vested in the Board of the Company by its Articles of Incorporation, the Board is authorized to determine or alter the rights, preferences, privileges and restrictions granted to or imposed upon any wholly unissued series of Preferred Stock, to fix the number of shares constituting any such series and the designation thereof, within the limits and restrictions stated in any resolution or resolutions of the Board originally fixing the number of shares constituting any series, and to increase or decrease (but not below the number of shares of such series then outstanding) the number of shares of any such series subsequent to the issue of shares of that series, and

WHEREAS, there has previously been created a Series B Preferred Stock ("Series B Shares") of the Company, and

WHEREAS, the Company desires to clarify certain provisions regarding the rights of the Series B Shares and to provide the Series B Shares with a voluntary conversion right,

NOW THEREFORE, BE IT RESOLVED, that the Board of Directors hereby amends and restates the rights, preferences, privileges and restrictions of the Series B Preferred Stock as follows:

1. Designation of Series and Number of Shares. There is hereby designated a Series B of Preferred Stock ("Series B Preferred Stock"). The number of shares constituting the Series B Preferred Stock is fixed at seven million (7,000,000).

2. **Dividends** If the Board of Directors shall declare dividends out of funds legally available therefor, such dividends shall be declared on both the Common Stock and the Series B Preferred Stock (and such series of Preferred Stock as the Board of Directors May determine), in equal amounts per share to the shares of Common Stock then outstanding and the shares of Common Stock which holders of Series B Preferred Stock have the right to acquire upon conversion of the Series B Preferred Stock then held by them

3. **Liquidation** Upon the voluntary or involuntary liquidation, winding up or dissolution of the Corporation, out of the assets available for distribution to shareholders the Series B Preferred Stock shall be entitled to receive, in preference to any payment on the Common Stock, or any other series of Preferred Stock, an amount equal to \$1.50 per share plus any dividends previously declared and unpaid plus \$0.09 per share per annum, beginning July 1, 1995 and ending on the date of liquidation, winding up or dissolution of the Corporation. After the full preferential liquidation amount has been paid to, or determined and set apart for, the Series B Preferred Stock, the remaining assets shall be paid in equal amounts per share on all shares of Series B Preferred Stock and the Common Stock (and any other series of Preferred Stock determined by the Board of Directors). In the event the assets of the Corporation are insufficient to pay the full preferential liquidation amount required to be paid to the Series B Preferred Stock, the entire remaining assets shall be paid to the Series B Preferred Stock and Common Stock and other series of Preferred shall receive nothing. A reorganization shall not be considered to be a liquidation, winding up or dissolution within the meaning of this Section 3 and the Series B Preferred Stock shall be entitled only to the rights provided in the plan of reorganization and Chapter 12 and 13 of the California General Corporation Laws and elsewhere in this Certificate

4. **Voting** Each holder of outstanding shares of Series B Preferred Stock shall be entitled to the number of votes equal to the number of whole shares of Common Stock into which shares of Series B Preferred Stock held by such holder are convertible (as adjusted from time to time pursuant to Section 5 hereof), at each meeting of shareholders of the Corporation and written actions of shareholders in lieu of meetings with respect to any and all matters presented to the shareholder of the Corporation for their action or consideration.

5. **Conversion** The holders of the Series B Preferred Stock shall have conversion rights as follows (the "Conversion Rights")

a. **Voluntary Conversion**

Each share of Series B Preferred Stock shall be convertible, at the sole option of the holder thereof, at any time into one share of Common Stock, provided, however, that the one-for-one conversion rate ("Conversion Rate") for the Series B Preferred Stock shall be subject to proportional, fair and equitable adjustment for stock splits, stock combinations, consolidations, reorganizations, stock distributions, stock dividends or recapitalization effecting the number of shares of Common Stock outstanding

b. Automatic Conversion Each share of Series B Preferred Stock shall automatically be converted in accordance with the then effective Conversion Rate immediately upon the closing of the sale of the Corporation's Common Stock in a firm commitment, underwritten public offering registered under the Securities Act of 1933, as amended (the "Securities Act"), other than a registration relating solely to a transaction under Rule 145 under such Act (or any successor thereto) or to an employee benefit plan of the Corporation, at a public price (prior to underwriters discounts and expenses) equal to or exceeding \$5.00 per share of Common Stock (as adjusted for any stock dividends, combinations or splits with respect to such shares) and the aggregate proceeds to the Corporation and/or any selling shareholders (after deduction for underwriters discounts and expenses relating to the issuance, including without limitation fees of the Corporation's counsel) equal or exceed \$7,500,000.

c. Subdivisions or Consolidations The Conversion Rate shall be proportionately adjusted for any increase or decrease in the number of issued shares of the Common Stock of the Corporation resulting from a division or consolidation of shares of stock or the payment of a stock dividend (but only on all outstanding shares of the Common Stock) or any other increase or decrease in the number of such shares outstanding effected without receipt of consideration by the Corporation.

d. Recapitalization If at any time or from time to time there shall be a recapitalization of the Common Stock (other than a subdivision, combination or merger or sale of assets transaction provided for elsewhere herein, provision shall be made so that the holders of the Series B Preferred Stock shall thereafter be entitled to receive upon conversion of the Series B Preferred Stock, the number of shares of stock or other securities or property of the Corporation or otherwise, to which a holder of Common Stock deliverable upon conversion would have been entitled on such recapitalization. In any such case, appropriate adjustment shall be made in the application of the provisions of this Section 5(d) with respect to the rights of the holders of the Series B Preferred Stock after the recapitalization to the end that the provisions of this Section 5(d) (including adjustment of the Conversion Ratio then in effect for each series and the number of shares purchasable upon conversion of the Preferred Stock) shall be applicable after that event as nearly equivalent as may be practicable.

e. No Impairment The Corporation will not, by amendment of its Articles of Incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Corporation, but will at all times in good faith assist in the carrying out of all the provisions of this Section 5 and in the taking of all such action as may be necessary or appropriate in order to protect the Conversion Rights of the holders of the Series B Preferred Stock against impairment.

f. Certificates as to Adjustments Upon the occurrence of each adjustment or readjustment of any Conversion Rate pursuant to this Section 5, the Corporation at its expense shall within fifteen (15) days of the occurrence compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series B Preferred Stock a certificate

executed by the Corporation's President or Chief Financial Officer setting forth such adjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any holder of Series B Preferred Stock, within fifteen (15) days of receipt of such request furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Conversion Rate for such series of Preferred Stock at the time in effect, and (iii) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of the Series B Preferred Stock.

g. Issue Taxes. The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of Series B Preferred Stock pursuant hereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder in connection with such conversion.

h. Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series B Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the Series B Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series B Preferred Stock, the Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose, including, without limitation, engaging in best efforts to obtain the requisite shareholder approval of any necessary amendment to this Certificate.

i. Fractional Shares. No fractional shares shall be issued upon the conversion of the shares of Series B Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series B Preferred Stock by a holder thereof shall be aggregated for purposes determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fraction of a share of Common Stock, the Corporation shall, in lieu of issuing any fractional share, pay the holder otherwise entitled to such fraction a sum in cash equal to the fair market value of such fraction on the date of conversion (as determined in good faith by the Board of Directors).

j. Notices. Any notice required by the provisions of this Section 5 to be given to the holders of shares of Series B Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

The foregoing amendment of the Certificate of Determination of Preferences of Preferred Stock, Series B of the Company has been duly approved by the required vote of the shareholders of this corporation in accordance with Sections 401(d), 902 and 903 of the California Corporations Code. As of the record date for the shareholders meeting at which this amendment was approved, there were no shares of Common Stock of the Company outstanding. As of such date, the total number of outstanding shares of Preferred Stock of the Company was 143,134 shares of Series A Preferred Stock and 5,598,008 of Series B Preferred Stock. The Series A Preferred Stock is nonvoting and has no right to vote on this amendment. The percentage vote required to approve this amendment was more than 50% of the outstanding Series B Preferred Stock. The number of shares voting in favor of the amendment equaled or exceeded the vote required.

We further declare under penalty of perjury under the laws of the State of California that the matters set forth in this Certificate are true and correct of our knowledge.

Executed at San Diego, California, on July 19, 1996



Renney E. Senn, President



Judith M. O'Brien, Assistant Secretary

CERTIFICATE OF AMENDMENT
OF
ARTICLES OF INCORPORATION

JUN 9 1995

RENNEY E. SENN and SIMON F. COLEMAN certify that:

Secretary of State

1. They are the President and Secretary, respectively, of SpectraNet International, a California corporation.

2. The following provision shall be added as Article V to the corporation's Articles of Incorporation:

"Upon the filing of this Amendment to the Articles of Incorporation, each share of common stock of the Corporation outstanding immediately prior to such filing shall be reconstituted and reclassified as one share of the Corporation's Series B Preferred Stock."

3. The foregoing Amendment of Articles of Incorporation has been duly approved by the Board of Directors.

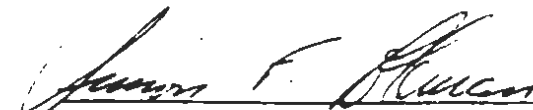
4. The foregoing Amendment of Articles of Incorporation has been duly approved by the required vote of Common Stock shareholders in accordance with Section 902 of the California Corporations Code. The total number of outstanding shares of the Common Stock of the corporation is 3,149,671. The number of shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50% in each eligible class and series. There are 143,134 shares outstanding of the Preferred Stock Series A and no outstanding shares of the Preferred Stock Series B.

We further declare under penalty of perjury under the laws of the State of California that the matters set forth in this certificate are true and correct of our own knowledge.

Dated: June 7, 1995



Renney E. Senn, President



Simon F. Coleman, Secretary



State
of
California
SECRETARY OF STATE

A462085

CORPORATION DIVISION

I, *BILL JONES*, Secretary of State of the State of California, hereby certify:

That the annexed transcript has been compared with the corporate record on file in this office, of which it purports to be a copy, and that same is full, true and correct.

IN WITNESS WHEREOF, I execute
this certificate and affix the Great
Seal of the State of California this

JUN - 8 1995



Bill Jones

Secretary of State

CERTIFICATE OF DETERMINATION
OF PREFERENCES OF PREFERRED STOCK, SERIES B
OF SPECTRANET INTERNATIONAL

JUN 7 1995

BILL JONES Secretary of State

A. The undersigned, Ronney E. Senn and Simon F. Coleman, hereby certify that they are the duly elected and acting President and Secretary, respectively, of SpectraNet International, a California corporation (the "Corporation"), and further certify that:

B. The number of authorized shares of Preferred Stock, Series A, of the Corporation is One Hundred Forty Three Thousand, One Hundred Thirty Four (143,134), all of which have been issued.

C. The number of authorized shares of Preferred Stock Series B of the Corporation is 7,000,000, none of which have been issued.

D. The Board of Directors of the Corporation at San Diego, California, on April 28, 1995, duly adopted the following resolutions:

WHEREAS, the Articles of Incorporation of the Corporation, as amended, provide for a class of shares known as Preferred Stock, comprising 10,000,000 shares, issuable from time to time in one or more series;

WHEREAS, the Board of Directors of the Corporation is authorized to determine or alter the rights, preferences, privileges and restrictions granted to or imposed upon any wholly unissued series of Preferred Stock and to fix and to determine the designation thereof; and

WHEREAS, the Corporation has not heretofore issued any other series of such Preferred Stock, and the Board of Directors of the Corporation desires, pursuant to its authority as aforesaid, to designate a series thereof, to be referred to as Series B, and to determine and fix the rights, preferences, privileges and restrictions relating to said series of Preferred Stock and the number of shares constituting said series;

NOW THEREFORE, BE IT RESOLVED, that the Board of Directors hereby fixes and determines the designation of, the number of shares constituting, and the rights, preferences, privileges and restrictions relating to said series of Preferred Stock as follows:

1. Designation of Series and Number of Shares. There is hereby designated a Series B of Preferred Stock ("Series B Preferred Stock"). The number of shares constituting the Series B Preferred Stock is fixed at seven million (7,000,000).

2. Dividends

If the Board of Directors shall declare dividends out of funds legally available therefor, such dividends shall be declared on both the Common Stock and the Series B Preferred Stock (and such series of Preferred Stock as the Board of Directors may determine), in equal amounts per share to the shares of Common Stock then outstanding and the shares of Common Stock which holders of Series B Preferred Stock have the right to acquire upon conversion of the Series B Preferred Stock then held by them.

3. Liquidation.

Upon the voluntary or involuntary liquidation, winding up or dissolution of the corporation, out of the assets available for distribution to shareholders the Series B Preferred Stock shall be entitled to receive, in preference to any payment on the Common Stock, or any other series of Preferred Stock, an amount equal to \$1.50 per share, plus any dividends previously declared and unpaid and plus \$.09 per share per annum, beginning on July 1, 1995 and ending on the date of liquidation, winding up or dissolution of the corporation. After the full preferential liquidation amount has been paid to, or determined and set apart for, the Series B Preferred Stock, the remaining assets shall be paid in equal amounts per share on all shares of Series B Preferred Stock and the Common Stock (and any other series of Preferred Stock determined by the Board of Directors). In the event the assets of the Corporation are insufficient to pay the full preferential liquidation amount required to be paid to the Series B Preferred Stock, the entire remaining assets shall be paid to the Series B Preferred Stock and the Common Stock and other series of Preferred Stock shall receive nothing. A reorganization shall not be considered to be a liquidation, winding up or dissolution within the meaning of this Section 3 and the Series B Preferred Stock shall be entitled only to the rights provided in the plan of reorganization and Chapter 12 and 13 of the California General Corporation Laws and elsewhere in this Certificate.

4. Voting

Each holder of outstanding shares of Series B Preferred Stock shall be entitled to the number of votes equal to the number of whole shares of Common Stock into which shares of Series B Preferred Stock held by such holder are convertible (as adjusted from time to time pursuant to Section 5 hereof), at each meeting of stockholders of the Corporation and written actions of stockholders in lieu of meetings with respect to any and all matters presented to the stockholder of the Corporation for their action or consideration.

5. Conversion. The holders of the Series B Preferred Stock shall have conversion rights as follows (the "Conversion Rights"):

a. Automatic Conversion. Each share of Series B Preferred Stock shall automatically be converted into one share of Common Stock (the "Conversion Rate") immediately upon the closing of the sale of the Corporation's Common Stock in a firm commitment, underwritten public offering registered under the Securities Act of 1933, as amended (the "Securities Act"), other than a registration relating solely to a transaction under Rule 145 under such Act (or any successor thereto) or to an employee benefit plan of the Corporation, at a public offering price (prior to underwriters' discounts and expenses) equal to or exceeding \$5.00 per share of Common Stock (as adjusted for any stock dividends, combinations or splits with respect to such shares) and the aggregate proceeds to the Corporation and/or any selling stockholders (after deduction for underwriters' discounts and expenses relating to the issuance, including without limitation fees of the Corporation's counsel) equal or exceed \$7,500,000.

b. Subdivisions or Consolidations. The Conversion Rate shall be proportionately adjusted for any increase or decrease in the number of issued shares of the Common Stock of the Corporation resulting from a division or consolidation of shares of stock or the payment of a stock dividend (but only on all outstanding shares of the common stock) or any other increase or decrease in the number of such shares outstanding effected without receipt of consideration by the Corporation.

c. No Impairment. The Corporation will not, by amendment of its Articles of Incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Corporation, but will at all times in good faith assist in the carrying out of all the provisions of this Section 4 and in the taking of all such action as may be necessary or appropriate in order to protect the Conversion Rights of the holders of the Series B Preferred Stock against impairment.

d. Certificates as to Adjustments. Upon the occurrence of each adjustment or readjustment of any Conversion Rate pursuant to this Section 5, the Corporation at its expense shall within fifteen (15) days of the occurrence compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series B Preferred Stock a certificate executed by the Corporation's President or Chief Financial Officer setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any holder of Series B Preferred Stock, within fifteen (15) days of receipt of such request furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Conversion Rate for such series of

Preferred Stock at the time in effect, and (iii) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of the Series B Preferred Stock.

e. Issue Taxes. The Corporation shall pay any and all issue and other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of Series B Preferred Stock pursuant hereto; provided, however, that the Corporation shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder in connection with any such conversion.

f. Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series B Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the Series B Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series B Preferred Stock, the Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to this Certificate.

g. Fractional Shares. No fractional share shall be issued upon the conversion of the shares of Series B Preferred Stock. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series B Preferred Stock by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of a fraction of a share of Common Stock, the Corporation shall, in lieu of issuing any fractional share, pay the holder otherwise entitled to such fraction a sum in cash equal to the fair market value of such fraction on the date of conversion (as determined in good faith by the Board of Directors).

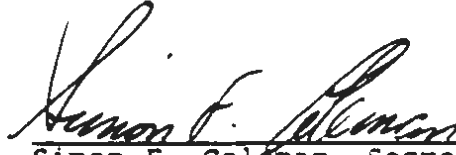
h. Notices. Any notice required by the provisions of this Section 5 to be given to the holders of shares of Series B Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

We further declare under penalty of perjury under the laws of the State of California that the matters set forth in this Certificate are true and correct of our own knowledge.

Executed at San Diego, California, on June 7, 1995



Renney E. Sann, President



Simon F. Coleman, Secretary

A461636



State
of
California
SECRETARY OF STATE

CORPORATION DIVISION

I, *BILL JONES*, Secretary of State of the State of California, hereby certify:

That the annexed transcript has been compared with the corporate record on file in this office, of which it purports to be a copy, and that same is full, true and correct.

IN WITNESS WHEREOF, I execute
this certificate and affix the Great
Seal of the State of California this

MAY 30 1995



Bill Jones

Secretary of State

CERTIFICATE OF DETERMINATION
OF PREFERENCES OF PREFERRED STOCK, SERIES A
SPECTRANET INTERNATIONAL

MAY 25 1995


BILL JONES, Secretary of State

A. The undersigned, Renney E. Senn and Simon F. Coleman, hereby certify that they are the duly elected and acting President and Secretary, respectively, of SpectraNet International, a California corporation (the "Corporation"), and further certify that:

B. The number of authorized shares of Preferred Stock, Series A, of the Corporation is One Hundred Forty Three Thousand, One Hundred Thirty Four (143,134), none of which have been issued.

C. The Board of Directors of the Corporation by written consent, on January 28, 1994, duly adopted the following resolutions:

WHEREAS, the Articles of Incorporation of the Corporation, as amended, provide for a class of shares known as Preferred Stock, comprising 1,000,000 shares, issuable from time to time in one or more series;

WHEREAS, the Board of Directors of the Corporation is authorized to determine or alter the rights, preferences, privileges and restrictions granted to or imposed upon any wholly unissued series of Preferred Stock and to fix and to determine the designation thereof; and

WHEREAS, the Corporation has not heretofore issued any such Preferred Stock, and the Board of Directors of the Corporation desires, pursuant to its authority as aforesaid, to designate one series thereof, to be referred to as Series A, and to determine and fix the rights, preferences, privileges and restrictions relating to said series of Preferred Stock and the number of shares constituting said series;

NOW THEREFORE, BE IT RESOLVED, that the Board of Directors hereby fixes and determines the designation of, the number of shares constituting, and the rights, preferences, privileges and restrictions relating to said series of Preferred Stock as follows:

1. Designation of Series and Number of Shares. There is hereby designated a Series A of Preferred Stock ("Series A Preferred Stock"). The number of shares constituting the Series A Preferred Stock is fixed at One Hundred Forty Three Thousand, One Hundred Thirty Four (143,134).

2. Dividends

The Series A Preferred Stock is entitled to receive, out of funds legally available therefor, cumulative dividends at the annual rate of \$20 per share and no more, payable on June 30th and December 31st of each year when and as declared by the Board of Directors. Such dividends shall accrue from the date of issuance whether or not earned so that no dividends or other distributions shall be made with respect to the Common Stock or other series of Preferred Stock and no Common Stock or other series of Preferred Stock shall be purchased until cumulative dividends on the Series A Preferred Stock for all past dividend periods and for the then current six month dividend period shall have been declared and paid or set apart. After cumulative dividends on the Series A Preferred Stock for all past dividend periods and for the then current six-month dividend period shall have been declared and paid or set apart, if the Board of Directors shall elect to declare additional dividends out of funds legally available therefor, such additional dividends shall be declared solely on the Common Stock and such other series of Preferred Stock as the Board of Directors may determine.

3. Voting

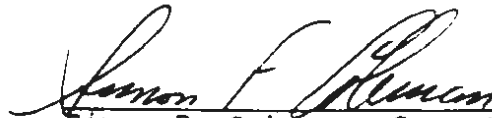
Holder of Series A Preferred Shares shall not be entitled to vote the shares except as required by law.

We further declare under penalty of perjury under the laws of the State of California that the matters set forth in this Certificate are true and correct of our own knowledge.

Executed at San Diego, California, on April 28, 1995.



Renney E. Senn, President



Simon F. Coleman, Secretary

4461635

CERTIFICATE OF AMENDMENT
OF
ARTICLES OF INCORPORATION

ENDORSED
FILED
In the office of the Secretary of State
of the State of California

MAY 25 1995

Bill Jones
BILL JONES, Secretary of State

RENNEY E. SENN and SIMON F. COLEMAN certify that:

1. They are the President and Secretary, respectively, of SpectraNet International, a California corporation.

2. Article IV of the Articles of Incorporation of this corporation is amended to read as follows:

"(a) This corporation is authorized to issue two classes of shares, designated respectively "Common Stock" and "Preferred Stock." The number of shares of Common Stock which the Corporation is authorized to issue is 5,000,000. The number of shares of Preferred Stock which the Corporation is authorized to issue is 10,000,000."

3. The foregoing Amendment of Articles of Incorporation has been duly approved by the Board of Directors.

4. The foregoing Amendment of Articles of Incorporation has been duly approved by the required vote of Common Stock shareholders in accordance with Section 902 of the California Corporations Code. The total number of outstanding shares of the Common Stock of the corporation is 3,149,671. The number of shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50% in each eligible class and series.

There are no shares of Preferred Stock outstanding.

We further declare under penalty of perjury under the laws of the State of California that the matters set forth in this certificate are true and correct of our own knowledge.

Dated: May 5, 1995

Renney E. Senn

Renney E. Senn, President

Simon F. Coleman

Simon F. Coleman, Secretary

CERTIFICATE OF AMENDMENT
OF
ARTICLES OF INCORPORATION

A443954

ENDORSED
FILED

Office of the Secretary of State
of the State of California

MAR 15 1994

TONY MILLER
Acting Secretary of State

RENNEY E. SENN and SIMON F. COLEMAN certify that:

1. They are the President and Secretary, respectively, of SpectraNet International, a California corporation.
2. Article IV of the Articles of Incorporation of this corporation is amended to read as follows
 - (a) This Corporation is authorized to issue two classes of shares, designated respectively "Common Stock" and "Preferred Stock." 5,000,000 shares of Common Stock, no par value, and 1,000,000 shares of Preferred Stock, no par value, may be issued.
 - (b) The Board of Directors may divide the Preferred Stock into any number of series. The Board shall fix the designation in number of shares of each such series. The Board may determine and alter the right, preferences, and privileges and restrictions granted to and imposed upon any wholly unissued series of the Preferred Stock. The Board of Directors (within the limits and restrictions of any resolution adopted by it, originally fixing the number of shares of any series) may increase or decrease the number of shares of any such series after the issue of shares of that series, but not below the number of then outstanding shares of such series.
3. The foregoing Amendment of Articles of Incorporation has been duly approved by the Board of Directors.
4. The foregoing Amendment of Articles of Incorporation has been duly approved by the required vote of shareholders in accordance with Section 902 of the California Corporations Code. The total number of outstanding shares of the corporation is 100. The number of shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50%.

We further declare under penalty of perjury under the laws of the State of California that the matters set forth in this certificate are true and correct of our own knowledge.

Dated: October 15, 1993



Renney E. Senn, President



Simon F. Coleman, Secretary

A43047

ENDORSED
FILED
In the Office of the Secretary of State
of the State of California

SEP 7 1993

**CERTIFICATE OF AMENDMENT
OF
ARTICLES OF INCORPORATION**

MARCH FONG EU, Secretary of State

Renney E. Senn and Simon F. Coleman certify that:

1. They are the President and Secretary, respectively, of Lambda Link International, a California corporation.

2. Article I of the Articles of Incorporation of this corporation is amended to read as follows:

The name of the corporation is SpectraNet International

3. The foregoing Amendment of Articles of Incorporation has been duly approved by the Board of Directors.

4. The foregoing Amendment of Articles of Incorporation has been duly approved by the required vote of shareholders in accordance with Section 902 of the California Corporations Code. The total number of outstanding shares of the corporation is 100. The number of shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50%.

We further declare under penalty of perjury under the laws of the State of California that the matters set forth in this certificate are true and correct of our own knowledge.

Dated: Sept 7, 1993

Renney E. Senn
Renney E. Senn, President

Simon F. Coleman
Simon F. Coleman, Secretary

4432551

ENDORSED
FILED

In the office of the Secretary of State
of the State of California

MAY 24 1993

CERTIFICATE OF AMENDMENT
OF
ARTICLES OF INCORPORATION
OF
SIGMA LINK

MARCH FONG EU, Secretary of State

Casey Glennon and Renney Senn certify that:

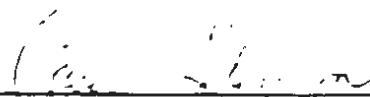
1. They are the President and the Secretary, respectively, of SIGMA LINK, a California corporation.
2. Article I of the Articles of Incorporation of this corporation is amended to read as follows:

The name of the corporation is LAMBDA LINK INTERNATIONAL.


4. The foregoing Amendment of Articles of Incorporation has been duly approved by the Board of Directors.
5. The foregoing Amendment of Articles of Incorporation has been duly approved by the required vote of shareholders in accordance with Section 902 of the Corporations Code. The total number of outstanding shares of the corporation is 100. The number of shares voting in favor of the amendment exceeded the vote required. The percentage vote required was more than fifty percent (50%).

We further declare under penalty of perjury under the laws of the State of California that the matters set forth in this certificate are true and correct of our own knowledge.

DATE: May 1, 1993



Casey Glennon, President



Renney E. Senn, Secretary

1809083

ARTICLES OF INCORPORATION
OF
SIGMA LINK

ENDORSED
FILED
in the office of the Secretary of State
of the State of California

JUL 16 1992

MARCH FONG EU, Secretary of State

I

The name of the corporation is SIGMA LINK.

II

The purpose of this corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of California other than the banking business, the trust company business or the practice of a profession permitted to be incorporated by the California Corporations Code.

III

The name and address in the State of California of this corporation's initial agent for service of process is:

Renney E. Senn
6440 Lusk Boulevard
Suite D-111
San Diego, CA 92121

IV

This corporation is authorized to issue only one class of shares of stock and the total number of shares which this corporation is authorized to issue is 1,000,000.

Dated: July 16, 1992



Scott T. Schafer

I hereby declare that I am the person who executed the foregoing Articles of Incorporation, which execution is my act and deed.



Scott T. Schafer

ATTACHMENT II

PROPOSED TARIFF

TITLE SHEET

**INTEREXCHANGE TELECOMMUNICATIONS TARIFF
OF FLORIDA**

FirstWorld Communications, Inc.

This tariff is filed in accordance with the Florida Public Service Commission. All services contained in this tariff are competitive.

This tariff contains the descriptions, regulations, and rates applicable to the furnishing of service and facilities for interexchange telecommunications services provided by FirstWorld Communications, Inc., within the State of Florida. This tariff is on file with the Public Service Commission. Copies may be inspected during normal business hours at the Company's principal place of business, at 9333 Genesee Avenue, Suite 200, San Diego, California 92121.

ISSUED: July 8, 1998

EFFECTIVE:

ISSUED BY: Jo Ann Hill, Regulatory Coordinator
9333 Genesee Avenue, Suite 200
San Diego, California 92121
(888) 644-4357

CHECK SHEET

All sheets of this tariff are effective as of the date shown at the bottom of the respective sheet(s). Original and revised sheets as named below comprise all changes from the original tariff and are currently in effect as of the date of the bottom of this page.

<u>SHEET</u>	<u>REVISION</u>	<u>SHEET</u>	<u>REVISION</u>
1	Original	22	Original
2	Original	23	Original
3	Original	24	Original
4	Original	25	Original
5	Original	26	Original
6	Original	27	Original
7	Original	28	Original
8	Original	29	Original
9	Original	30	Original
10	Original	31	Original
11	Original	32	Original
12	Original	33	Original
13	Original	34	Original
14	Original	35	Original
15	Original	36	Original
16	Original	37	Original
17	Original	38	Original
18	Original	39	Original
19	Original	40	Original
20	Original	41	Original
21	Original	42	Original
		43	Original

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TABLE OF CONTENTS

Title Page 1

Check Sheet 2

Table of Contents 3

Alphabetical Index 4

Symbols 6

Tariff Format 7

SECTION 1 - Technical Terms and Abbreviations 8

SECTION 2 - Rules and Regulations 11

SECTION 3 - Description of Service 24

SECTION 4 - Rates 36

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ALPHABETICAL INDEX

Advance Payments 14

Busy Line Verification & Interrupt 35

Calculation of Distance 25

Call Timing 26

Cancellation and Restoration of Service 18

Cancellation by the Customer 18

Cost of Collection and Repair 21

Deposits 14

Description of Service 24

Directory Assistance 29

Disconnection of Service without Notice 19

Holiday Rates 28

Inspection, Testing, and Adjustment 20

Installation 17

Interconnection 17

FirstWorld Debit Card Service 32

FirstWorld Message Toll Service 30

Late Fee 21

Liabilities of the Company 12

Limitations 11

Operator Services 33

Payment for Service 17

Rates 36

Rates - Busy Line Verification and Interrupt 43

Rates - Directory Assistance 37

Rates - Exemptions and Special Rates 36

Rates - FirstWorld Debit Card Services 41

Rates - FirstWorld Message Toll Service 38

Rates - Operator Services 42

Rates - Toll Free Service 40

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ALPHABETICAL INDEX, (CONT'D)

Reconnection Charge 21
Refusal, Suspension or Cancellation by the Company 18
Reservation of Toll Free Numbers 21
Restoration of Service 19
Return Check Charges 21
Rules and Regulations 11
Rules Applicable to Operator Services to Aggregator Locations 22
Special Conditions Applicable to Operator Services 23
Symbols 6
Table of Contents 3
Tariff Format 7
Taxes and Fees 14
Technical Terms and Abbreviations 8
Terminal Equipment 16
Time of Day Rate Periods 27
Toll-Free Service 31
Undertaking of FirstWorld 11

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SYMBOLS

The following symbols are used for the purposes indicated below:

- *** - Indicates new or revised tariff sheet included with this filing
- D** - Delete or discontinue.
- I** - Increase to a rate.
- M** - Moved from another tariff location.
- N** - New.
- R** - Reduction to a rate.
- T** - Change in text but no change in rate or regulation.

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TARIFF FORMAT

A. Sheet Numbering - Sheet numbers appear in the upper right corner of the page. Sheets are numbered sequentially. However, new sheets are occasionally added to the tariff. When a new sheet is added between sheets already in effect, a decimal is added. For example, a new sheet added between sheets 14 and 15 would be 14.1.

B. Sheet Revision Numbers - Revision numbers appear in the upper right corner of each page. These numbers are used to determine the most current sheet version on file with the Florida Public Service Commission. For example, the 4th revised Sheet 14 cancels the 3rd revised Sheet 14. Because of various suspension periods, deferrals, etc. the Florida Public Service Commission follows in its tariff approval process, the most current sheet number on file with the Commission is not always the tariff in effect. Consult the Check Sheet for the sheet currently in effect.

C. Paragraph Numbering Sequence - There are nine levels of paragraph coding. Each level of coding is subservient to its next higher level:

2.
2.1
2.1.1
2.1.1.A.
2.1.1.A.1.
2.1.1.A.1.(a)
2.1.1.A.1.(a).1.
2.1.1.A.1.(a).1.(i).
2.1.1.A.1.(a).1.(i).(1)

D. Check Sheets - When a tariff filing is made with the Florida Public Service Commission, an updated Check Sheet accompanies the tariff filing. The Check Sheet lists the sheets contained in the tariff, with a cross reference to the current revision number. When new pages are added, the Check Sheet is changed to reflect the revision. All revisions made in a given filing are designated by an asterisk (*). There will be no other symbols used on this page if these are the only changes made to it (i.e., the format, etc. remain the same, just revised revision levels on some pages.) The tariff user should refer to the latest Check Sheet to find out if a particular sheet is the most current on file with the Florida Public Service Commission

ISSUED: July 8, 1998**EFFECTIVE:**

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11 (9800)

SECTION 1 - TECHNICAL TERMS AND ABBREVIATIONS

Access Line - A local channel for voice, data, or video communications which connects the Customer location to a location of the Company or its underlying carrier.

Account - The Customer who has agreed, orally or in writing, to honor the terms of service established by the Company. An Account may have more than one service billed to the same Customer address. An Account may include multiple locations for the same Customer.

Aggregator - Any person or other legal entity that may be a Customer and, in the ordinary course of its operations, makes telephones available to the public or to transient users of its premises, for telephone calls using a provider of operator services.

Authorization Code - A pre-defined series of numbers to be dialed by the Customer upon access to the Company's system to identify the caller and validate the caller's authorization to use the services provided. The Customer is responsible for charges incurred through the use of his or her assigned Authorization Code.

Business Customer - For the purpose of this tariff, a Business Customer is a Customer of the Company whose primary use of the Company's service is for business purposes. A Business Customer is also a Customer who accesses the Company's service using an access line that has been assigned a business class of service by the local service provider.

Collect Call - A billing arrangement by which the charges for a call may be billed to the called party, provided the called party agrees to accept the charges.

Commission - The Florida Public Service Commission.

ISSUED: July 8, 1998

EFFECTIVE:

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9333 Genesee Avenue, Suite 200
San Diego, California 92121
(888) 644-4357

11 19800

SECTION 1 - TECHNICAL TERMS AND ABBREVIATIONS, (CONT'D.)

Company - FirstWorld Communications, Inc., unless stated otherwise.

Company's Point of Presence - Location of the serving central office associated with access to the Company's or its underlying carrier's network.

Consumer - A person who is not a Customer who initiates any telephone calls using operator services.

Customer - Any person, firm, partnership, corporation or other entity which subscribes to or uses service under the terms and conditions of this tariff. The Customer is responsible for the payment of charges for service offered by the Company which are subscribed to or used by the Customer. The Customer is also responsible for payment of charges for a third person's use of service to which the Customer subscribes.

Customer Dialed Calling Card - A service whereby the Customer dials all of the digits necessary to route and bill the call to a valid non-FirstWorld calling card or credit card.

Debit Account - An account which consist of a prepaid usage balance depleted on a real time basis during each debit service call.

Debit Card - A card issued by the Company which provides the Customer with a Personal Account code and instructions for accessing the Carrier's network.

Debit Service Call - A service accessed via a "1-800" or other access code dialing sequence whereby the Customer or Authorized User dials all of the digits necessary to route a call. Network usage for each call is deducted from the available balance on a Company-issued Debit Account.

Equal Access - The ability of the Company to serve Customers on a presubscribed basis rather than through the use of dial access codes.

Initial And Additional Period - The Initial Period denotes the interval of time allowed at the rate specified for a connection between given service points. The Additional Period denotes the interval of time used for measuring and charging for time in excess of the Initial Period.

ISSUED: July 8, 1998

EFFECTIVE:

ISSUED BY: Jo Ann Hill, Regulatory Coordinator
9333 Genesee Avenue, Suite 200
San Diego, California 92121
(888) 644-4357

SECTION 1 - TECHNICAL TERMS AND ABBREVIATIONS, (CONT'D.)

LATA - Local access and transport area. A geographic area established by the US District Court for the District of Columbia in Civil Action No. 82-0192.

LEC - Local Exchange Company

Operator Station Call - A service whereby the Customer places a non-Person to Person call with the assistance of an operator (live or automated.)

Person to Person Call - A service whereby the person originating the call specifies a particular person to be reached, or a particular station, room number, department, or office to be reached through a PBX attendant.

Premises - The physical space designated by the Customer for the termination of the Company's service.

Residential Customer - For the purpose of this tariff, a Residential Customer is a Customer of the Company whose primary use of the Company's service is for personal use in a house, apartment or other residential dwelling unit. A Residential Customer is also a Customer who accesses the Company's service using an access line that has not been assigned a business class of service by the local service provider.

Switched Access - A method for reaching the Company through the local service provider's switched network whereby the Customer uses standard business or residential local lines.

Terminal Equipment - Telecommunications devices, apparatus and associated wiring on the Premises of the Customer.

Third Party Billing - A billing arrangement by which the charges for a call may be billed to a telephone number that is different from the calling number and the called number.

Travel Card - A proprietary calling card offered by FirstWorld Communications, Inc. which is accessed by dialing a Company-provided access number.

ISSUED: July 8, 1998

EFFECTIVE:

ISSUED BY: Jo Ann Hill, Regulatory Coordinator
9333 Genesee Avenue, Suite 200
San Diego, California 92121
(888) 644-4357

1119800

SECTION 2 - RULES AND REGULATIONS

2.1 Undertaking of FirstWorld

- 2.1.1 The Company offers intrastate telecommunications service in conjunction with interstate service.
- 2.1.2 FirstWorld installs, operates, and maintains the communications services provided hereunder in accordance with the terms and conditions set forth under this tariff. FirstWorld may act as the Customer's agent for ordering access connection facilities provided by other carriers or entities, when authorized by the Customer. The Company's services are provided on a monthly basis, unless ordered on a longer term basis, and are available twenty-four hours per day.
- 2.1.3 No charges apply to incomplete calls.

2.2 Limitations

- 2.2.1 Service is offered subject to the availability of the necessary facilities and equipment, or both facilities and equipment, and subject to the provisions of this tariff.
- 2.2.2 The Company reserves the right to discontinue or limit service when necessitated by conditions beyond its control, or when the Customer is using service in violation of provisions of this tariff, or in violation of the law.
- 2.2.3 The Company does not undertake to transmit messages, but offers the use of its facilities when available, and will not be liable for errors in transmission or for failure to establish connections.

ISSUED: July 8, 1998

EFFECTIVE:

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9333 Genesee Avenue, Suite 200
San Diego, California 92121
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1119800

SECTION 2 - RULES AND REGULATIONS, (CONT'D)

2.2 Limitations, (Cont'd)

2.2.4 All facilities provided under this tariff are directly controlled by the Company and the Customer may not transfer or assign the use of service or facilities without the express written consent of the Company. Such transfer or assignment shall only apply where there is no interruption of the use or location of the service or facilities.

2.2.5 Prior written permission from the Company is required before any assignment or transfer. All regulations and conditions contained in this tariff shall apply to all such permitted assignees or transferees, as well as all conditions of service.

2.3 Use

Services provided under this tariff may be used for any lawful purpose for which the service is technically suited.

2.4 Liabilities of the Company

2.4.1 The Company liability for damages arising out of mistakes, interruptions, omissions, delays, errors, or defects in transmission which occur in the course of furnishing service or facilities, in no event shall exceed an amount equivalent to the proportionate charge to the Customer for the period during which the faults in transmission occur.

2.4.2 The Company shall not be liable for claim or loss, expense or damage (including indirect, special or consequential damage) , for any interruption, delay, error, omission, or defect in any service, facility or transmission provided under this tariff, if caused by any person or entity other than the Company, by any malfunction of any service or facility provided by any other carrier, by an act of God, fire, war, civil disturbance, or act of government, or by any other cause beyond the Company's direct control.

ISSUED: July 8, 1998

EFFECTIVE:

ISSUED BY: Jo Ann Hill, Regulatory Coordinator
9333 Genesee Avenue, Suite 200
San Diego, California 92121
(888) 644-4357

11 19800

SECTION 2 - RULES AND REGULATIONS, (CONT'D)

2.4 Liabilities of Company, (Cont'd)

2.4.3 The Company shall not be liable for, and shall be fully indemnified and held harmless by Customer against any claim or loss, expense, or damage (including indirect, special or consequential damage) for defamation, libel, slander, invasion, infringement of copy-right or patent, unauthorized use of any trademark, tradename, or service mark, unfair competition, interference with or misappropriation or violation of any contract, proprietary or creative right, or any other injury to any person, property or entity arising out of the material, data, information, or other content revealed to, transmitted, or used by the Company under this tariff; or for any act or omission of the Customer; or for any personal injury or death of any person caused directly or indirectly by the installation, maintenance, location, condition, operation, failure, presence, use or removal of equipment or wiring provided by the Company, if not directly caused by negligence of the Company.

2.4.4 The Company shall not be liable for any defacement of or damages to the premises of a Customer resulting from the furnishing of service which is not the direct result of the Company's negligence.

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11/19800

SECTION 2 - RULES AND REGULATIONS, (CONT'D)**2.5 Deposits**

The Company does not require a deposit from the Customer.

2.6 Advance Payments

For Customers whom the Company determines an advance payment is necessary, the Company reserves the right to collect an amount not to exceed one (1) month's estimated charges as an advance payment for service. This will be applied against the next month's charges and a new advance payment may be collected for the next month.

2.7 Taxes and Fees

2.7.1 For Debit Card calls, state and local taxes are included in the stated rates in this tariff. For all other calls, state and local taxes (i.e., gross receipts tax, sales tax, municipal utilities tax) are listed as separate line items on the Customer's bill and are not included in the quoted rates and charges set forth in this tariff.

2.7.2 To the extent that a municipality, other political subdivision or local agency of government, or Commission imposes upon and collects from the Company a gross receipts tax, occupation tax, license tax, permit fee, franchise fee, or regulatory fee, such taxes and fees shall, insofar as practicable and allowed by law, be billed pro rata to Customers receiving service from the Company within the territorial limits of such municipality, other political subdivision or local agency of government.

2.7.3 The Company may adjust its rates and charges or impose additional rates and charges on its Customers in order to recover amounts it is required by governmental or quasi-governmental authorities to collect from or pay to others in support of statutory or regulatory programs. Such adjustments shall be listed in this tariff.

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SECTION 2 - RULES AND REGULATIONS, (CONT'D)

2.8 Terminal Equipment

The Company's facilities and service may be used with or terminated in Customer-provided terminal equipment or Customer-provided communications systems, such as a PBX or key system. Such terminal equipment shall be furnished and maintained at the expense of the Customer.

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11 1988

SECTION 2 - RULES AND REGULATIONS, (CONT'D)

2.9 Installation

Service is installed upon mutual agreement between the Customer and the Company

2.10 Payment for Service

The Customer is responsible for payment of all charges for services and equipment furnished to the Customer or to an Authorized User of the Customer by the Company. All charges due by the Customer are payable to the Company or to the Company's authorized billing agent. Terms of payment shall be according to the rules and regulations of the billing agent and subject to the rules of regulatory agencies, such as the Florida Public Service Commission. Any objections to billed charges must be reported to the Company or its billing agent. Adjustments to Customer's bills shall be made to the extent that circumstances exist which reasonably indicate that such changes are appropriate.

2.11 Interconnection

Service furnished by the Company may be connected with the services or facilities of other carriers. Such service or facilities, if used, are provided under the terms, rates, and conditions of the other carrier. The Customer is responsible for all charges billed by other carriers for use in connection with the Company. Any special interface equipment or facilities necessary to achieve compatibility between carriers is the responsibility of the Customer.

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SECTION 2 - RULES AND REGULATIONS, (CONT'D)**2.12 Cancellation and Restoration of Service**

Service continues to be provided until canceled by the Customer or until canceled by the Company as set forth below. The Company may render bills subsequent to the termination of service for charges incurred before termination. The Customer shall pay such bills in full in accordance with the payment terms of this tariff.

2.12.1 Cancellation by the Customer

The Customer may have service discontinued upon written or verbal notice to the Company. The Customer shall pay the Company for service furnished until the cancellation date specified by the Customer or until the date that the written cancellation notice is received, whichever is later.

2.12.2 Refusal, Suspension or Cancellation by the Company

- A.** The Company may disconnect service to any Customer after five (5) days written notice for any reason stated below:
1. For failure of the Customer to pay a bill for service when due;
 2. For failure of the Customer to meet the Company's deposit and credit requirements;
 3. For failure of the Customer to make proper application for service;
 4. For the Customer's violation of any of the utility's rules on file with the Commission;
 5. For failure of the Customer to provide the utility reasonable access to its equipment and property;
 6. For failure of the Customer to furnish such service, equipment and/or rights-of-way necessary to service said Customer as shall have been specified by the Company as a condition of obtaining service; or

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SECTION 2 - RULES AND REGULATIONS, (CONT'D)

2.12 Cancellation and Restoration of Service, (Cont'd)

2.12.2 Refusal, Suspension or Cancellation by the Company, (Cont'd)

A. (cont'd.)

7. When necessary for the utility to comply with any order or request or any governmental authority having jurisdiction.

B. Disconnection of Service without Notice

Without notice, the Company may disconnect service to any Customer for any reason stated below:

1. In the event of tampering with the Company's equipment
2. In the event of a condition determined to be hazardous to the Customer, to other Customers of the Company, to the Company's equipment, the public, or to employees of the Company; or,
3. In the event of a Customer's use of equipment in such a manner as to adversely affect the Company's equipment or the Company's service to others.

2.12.3 Restoration of Service

If service has been discontinued for a valid cause by the Company as otherwise provided herein and the Customer wishes it continued, service shall, at the Company's discretion, be restored when all past due amounts are paid or the event giving rise to the discontinuance (if other than nonpayment) is corrected.

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SECTION 2 - RULES AND REGULATIONS, (CONT'D)

2.13 Inspection, Testing, and Adjustment

Upon reasonable notice, the facilities provided by the Company shall be made available to the Company for tests and adjustments as may be deemed necessary by the Company for maintenance. No interruption allowance will be granted for the time during which such tests and adjustments are made.

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SECTION 2 - RULES AND REGULATIONS, (CONT'D)

2.14 Cost of Collection and Repair

The Customer is responsible for any and all costs incurred in the collection of monies due the Company including legal and accounting expenses. Customer is responsible for recovery costs of Company-provided equipment and any expenses required for repair or replacement of damaged equipment.

2.15 Late Fee

A late fee of 1.5% monthly will be charged on any past due balances beginning 30 days from the mailing date of the bill.

2.16 Return Check Charges

A fee of \$15.00, or five percent of the amount of the check, whichever is greater, will be charged for each check returned for insufficient funds.

2.17 Reconnection Charge

A reconnection fee of \$25.00 per occurrence is charged when service is re-established for Customers who have been disconnected for nonpayment.

2.18 Reservation of Toll Free "800/888" Numbers

The Company will make every effort to reserve Toll Free "800/888" vanity numbers for Customers, but makes no guarantee or warranty that the requested number(s) will be available.

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SECTION 2 - RULES AND REGULATIONS, (CONT'D)

2.19 Rules Applicable to Operator Services Provided to Aggregator Locations

2.19.1 Subscribers who provide service to the transient public (aggregators) must place a notice on or near each instrument that provides transient access to the Company's operator services. The notice will be provided by the Company unless contractual agreement transfers the requirement to the call aggregator (as is frequently the case for LEC-provided public or semi-public service.) In all cases the notice will include the following information, customized for the individual installation:

- (A) InterLATA operator service is provided by FirstWorld Communications, Inc.
- (B) Per Call Service Charges: [as per product description and rate described elsewhere in this tariff]
- (C) Calls may be billed to most telephone company calling cards or to major credit cards such as MasterCard or American Express.
- (D) Please consult the local telephone company directory or local telephone company operator for intraLATA dialing instructions and rates.
- (E) To place an interLATA call dial [access code where applicable] + 0 + area code + interLATA telephone number.
- (F) The establishment surcharge for Local Calls is: \$X.XX/X% (to be billed by establishment).
- (G) The establishment surcharge for Long Distance Calls is: \$X.XX/X% (to be billed by establishment).
- (H) The Company's interLATA rates may be obtained by dialing [the toll free number provided by FirstWorld Communications, Inc.

When the premises equipment functions differently than stated above, the tent card or sticker will be modified to reflect the actual dialing pattern.

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SECTION 2 - RULES AND REGULATIONS, (CONT'D)

2.19 Special Conditions Applicable to Operator Services, (cont'd.)

2.19.2 Any applicable surcharges billed at check out time by a hotel/motel Subscriber for local or long distance calls must also be stated on the tent card. Subscriber surcharges will not be billed on telephone bills by FirstWorld Communications, Inc.

2.19.3 So long as Florida Rules require, IntraLATA "0+" calls and all "0-" (zero minus) calls will be routed to the local exchange carrier. Where the capability exists, the local exchange carrier will route 0- interLATA calls to the presubscribed carrier of the access line. In all other cases the local carrier will route 0- interLATA calls as determined by applicable state and federal laws.

2.19.4 Calls handled and billed by FirstWorld will be audibly and distinctly branded "FirstWorld Communications" at the beginning and end of the operator treatment portion of the call and prior to the commencement of billing. Callers may disconnect from the call after the brand and prior to connection without incurring any call charges.

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SECTION 3 - DESCRIPTION OF SERVICE

3.1 General

The Company provides intrastate, interexchange switched and dedicated telecommunications services between locations in Florida.

Customers can expect a call completion rate of not less than 90% during peak use periods for Feature Group D 1+ dialing. The call completion rate is calculated as the number of calls completed (including calls completed to a busy line or to a line which remains unanswered by the called party) divided by the number of calls attempted.

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SECTION 3 - DESCRIPTION OF SERVICE, (CONT'D)**3.2 Calculation of Distance**

Usage charges for all mileage sensitive products are based on the airline distance between the Rate Centers associated with the originating and terminating points of the call.

The distance between the originating and terminating points is calculated by using the "V" and "H" coordinates of the Rate Centers as defined by BellCore (Bell Communications Research), in the following manner:

- Step 1 -** Obtain the "V" and "H" coordinates for the Rate Center of the originating and the destination points.
- Step 2 -** Obtain the difference between the "V" coordinates of each of the Rate Centers. Obtain the difference between the "H" coordinates.
- Step 3 -** Square the differences obtained in Step 2.
- Step 4 -** Add the squares of the "V" difference and "H" difference obtained in Step 3.
- Step 5 -** Divide the sum of the square obtained in Step 4 by ten (10). Round to the next higher whole number if any fraction results from the division.
- Step 6 -** Obtain the square root of the whole number obtained in Step 5. Round to the next higher whole number if any fraction is obtained. This is the distance between the originating and terminating points of the call.

Formula:

$$\sqrt{\frac{(V_1 - V_2)^2 + (H_1 - H_2)^2}{10}}$$

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SECTION 3 - DESCRIPTION OF SERVICE, (CONT'D)

3.3 Call Timing

- 3.3.1 Long distance usage charges are based on the actual usage of the Company's network. Chargeable time begins when the calling and the called station are connected. Call timing is determined using industry standard methods of answer supervision, including hardware and software answer detection.
- 3.3.2 Chargeable time ends when the calling service point terminates, thereby releasing the network connection.
- 3.3.3 Unless otherwise specified in this tariff, usage is measured in one (1) minute increments for billing purposes. Partial usage will be rounded up to the next highest whole minute. All calls are rounded to the next highest billing increment. Any partial cents per call will be rounded up to the next highest cent.
- 3.3.4 Unless flat rated, usage charges are determined by the time of day rate periods and minutes of use within each rate period. The rate period is determined by the time and day of call originating at the Customer's Location.
- 3.3.5 No charges apply to unanswered calls.

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SECTION 3 - DESCRIPTION OF SERVICE, (CONT'D)

3.4 Time-Of-Day Rate Periods

Unless otherwise specified in the product description in this tariff, the following time-of-day and day-of-week rate periods are applicable to all calls. Evening rates shall apply to all calls placed on the Company's recognized Holidays except when a lower rate would normally apply.

DAY RATE PERIOD	8:00 AM to 5:00* PM Monday through Friday
EVENING RATE PERIOD	5:00 PM to 11:00* PM Sunday through Friday
NIGHT/WEEKEND RATE PERIOD	11:00 PM to 8:00* AM Sunday through Friday, all day Saturday and Sunday until 5:00* PM

*** to, but not including**

Calls are billed based on the rate in effect for the actual time-of-day rate period(s) during which the call occurs. Calls that cross rate period boundaries are billed the rate in effect in that boundary for each portion of the call.

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SECTION 3 - DESCRIPTION OF SERVICE, (CONT'D)

3.4 (Cont'd)

Holiday Rates

Calls on the following Company-recognized Holidays are rated at the Evening Rate Period or Off-Peak Rate Period rate unless a lower rate would normally apply.

New Year's Day**	Labor Day	Christmas Day**
Independence Day**	Thanksgiving Day	Martin Luther King Day*
Presidents' Day*	Memorial Day*	Columbus Day*
Veterans' Day**		

- * - Applies to Federally observed day only.
- ** - When this holiday falls on Sunday, the Holiday rate applies on the following Monday. When this holiday falls on a Saturday, the Holiday rate applies to calls placed on the preceding Friday.

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SECTION 3 - DESCRIPTION OF SERVICE, (CONT'D)

3.5 Directory Assistance

A Directory Assistance charge applies per intrastate directory assistance calls made from points within the State of Florida. The Customer may make two (2) requests for a telephone number per call. The Directory Assistance Charge applies regardless of whether the operator is able to supply the requested number. Discounts are not applicable to Directory Assistance Charges. Directory Assistance Charges are not included in usage commitments or computed in any discount calculations.

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SECTION 3 - DESCRIPTION OF SERVICE, (CONT'D)

3.6 FirstWorld Message Toll Service

FirstWorld Message Toll Service is available to Customers who originate direct dialed calls over switched or dedicated access lines. Calls are billed in one minute increments after an initial minimum call duration of one minute. When volume discounts are available, the volume is determined by the Customer's total monthly FirstWorld billing to the same account.

3.6.1 Switched Toll Service

Calls originate over standard switched access lines. Calls are billed in one minute increments after an initial minimum call duration of one minute.

3.6.2 Dedicated Access Toll Service

Calls originate over dedicated access lines purchased from the Company or provided by the Customer. Calls are billed in six (6) second increments after an initial minimum call duration of eighteen (18) seconds.

3.6.3 Calling Card

Calling Card Service is offered to Customers for originating calls while away from the primary location of the service. Service is accessed by dialing a toll-free access number provided by the Company.

Each call is rated based on call duration. Calls are billed in one minute increments. The minimum call duration for billing purposes is one minute. A service charge applies to each completed call.

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SECTION 3 - DESCRIPTION OF SERVICE, (CONT'D)

3.7 Toll-Free Service (i.e., 800/888)

3.7.1 General

Toll-Free Service is an offering that allows the calling party to charge each call to the called party without operator assistance. By the use of specially assigned prefixes, such as 800 or 888, the charge for each call is automatically billed to the Customer. A monthly recurring charges applies per toll free number.

3.7.2 Switched Access Toll Free Service

Switched Access Toll-Free Service calls are terminated over a standard switched line. Calls are billed in six (6) second increments. The minimum call duration for billing purposes is eighteen (18) seconds.

3.7.3 Dedicated Access Toll Free Service

Calls terminate over dedicated access lines purchased from the Company or provided by the Customer. Calls are billed in six (6) second increments. The minimum call duration for billing purposes is eighteen (18) seconds.

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SECTION 3 - DESCRIPTION OF SERVICE, (CONT'D)

3.8 FirstWorld Debit Card Service

FirstWorld Debit Card Service allows Customers to place direct dialed calls between locations within the State of Florida. Customers access the Company's network by dialing a toll-free number or other access dialing sequence and entering a Personal Account Code. The Company's system informs the Customer of the Available Usage Balance remaining in his/her Debit Account and prompts the Customer to place a call by entering a destination telephone number. Network usage for calls placed is deducted from the Available Usage Balance on the Customer's account on a real time basis as the call progresses.

Customers purchase a Debit Card which assigns each Customer a Debit Account, provides each Customer with a Personal Account Code and lists instructions for accessing and using Carrier's service. Debit Cards are available in varying denominations.

Purchase of a Debit Card entitles the Customer to use the Company's network for a number of minutes equivalent to the card denomination divided by the effective per minute rate. The Customer's right to utilize network usage within a given Debit Account associated with that Debit Account number. No minimum service period applies.

Payment for Retail Debit Cards and Available Usage in a Customer's Debit Account is non-refundable.

Retail Debit Card service rates are not distance or time of day sensitive in nature. Holiday discounts do not apply.

Network usage for Debit Card Calls is deducted from the Available Usage Balance in Customer's Debit Account in full unit increments. For debiting purposes, the minimum call usage is one (1) unit.

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SECTION 3 - DESCRIPTION OF SERVICE, (CONT'D)**3.9 Operator Services**

Operator Services are offered to Customers. Operator Services allow Customers and Consumers to place calls using operator assistance for call completion or billing.

Usage charges and an appropriate service charge will be assessed on a per call basis, as stated in this tariff. For calls made using a telephone company card, acceptance of the card will be dependent upon the Company's ability to verify the card as valid. Only those cards accepted by the Company may be used for Operator Services. The Company reserves the right to verify acceptance of charge prior to billing charges to a third party number.

- 3.9.1** Operator services may be used by the presubscribed Customer and by the Aggregator and their respective Consumers (i.e., patrons, guests, invitees or employees) to complete Person-to-Person, Collect, Third-Party, and/or Calling Card calls.
- 3.9.2** Charges for Operator Assisted Calls include two components: a usage-sensitive component based upon the time-of-day rate period, mileage, and duration of the call; and a fixed service charge based upon the type of operator service provided. A third component, the Operator Assisted 0- Surcharge, applies to calls for which the Customer/Consumer has the capability of dialing the destination number but elects to have the Company operator dial the number instead.
- 3.9.3** The usage-sensitive portion of the charge for an Operator Assisted Call is set forth in Section 3.9.9 below.
- 3.9.4** The fixed service charge portions of the charge for an Operator Assisted Call is set forth in Sections 3.9.8 below.
- 3.9.5** The Company shall not bill the Customer for any surcharges or fees imposed by the Aggregator. With respect to charges imposed by the Aggregator for the use of the telephone, the Aggregator is responsible for charging a flat rate and for posting of the charge in plain view at each telephone.

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F1 19800

SECTION 3 - DESCRIPTION OF SERVICE, (CONT'D)

3.9 Operator Services, (cont'd.)

3.9.6 Service may be suspended by the Company, without notice to the Customer or the Aggregator, by blocking traffic to certain countries, cities, or NXX exchanges, or by blocking calls using certain Customer Authorization Codes, Calling Cards or credit cards, when the Company deems it necessary to take such action to prevent unlawful use of service. The Company shall restore service as soon as it can be provided without undue risk, and shall, upon request by the Customer affected, assign a new Authorization Code to replace the one that has been deactivated. The Company reserves the right to validate the credit worthiness of Customers through available credit card, Calling Card, called number, Third Party telephone number and room number verification procedures. Where a requested billing method cannot be validated, the Customer/Consumer may be required to provide an acceptable alternate billing method or the Company may refuse to place the call.

3.9.7 The Aggregator is responsible for payment of the Company's charges for all calls placed from the Aggregator's Premises except for Collect, Third Party, Calling Card and credit card calls. The Calling Card or credit card holder or local exchange company service subscriber is responsible for payment of the Company's charges for all calls billed to a Calling Card, credit card or a telephone line number, respectively.

3.9.8 Per Call Service Charges

Per call charges apply in addition to the per minute usage rates when applicable. These charges apply in all rate periods.

3.9.9 Per Minute Usage Charges

Calls are billed in one (1) minute increments after an initial minimum call duration of one (1) minute. Partial minutes are rounded up to the next minute.

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SECTION 3 - DESCRIPTION OF SERVICE, (CONT'D)

3.10 Busy Line Verification and Interrupt

Busy Line Verification and Interrupt services are offered in areas where the service may be obtained from the local exchange carrier.

With Busy Line Verification (BLV), the FirstWorld operator will contact the LEC operator to determine if the called number or line is in use. Only one BLV will be made per telephone call and an associated charge will apply whether or not conversation was detected on the line. The operator will not complete the call for the Customer initiating the verification request.

Busy Line Interrupt (BLI) allows the FirstWorld operator to contact a LEC operator to interrupt a telephone conversation in progress, upon the caller's request and after a Busy Line Verification occurs. Upon the caller's request, the FirstWorld operator will contact the LEC operator, who will interrupt the busy line and inform the called party that there is a call waiting from the caller. The LEC operator will not complete the call, but will only inform the called party of the request. If the call is released the FirstWorld operator will offer to complete the call for the Customer initiating the interrupt request. An applicable service charge and applicable per minute charges will apply to the completed call. Only one BLI attempt will be made per telephone call and a charge will apply whether or not the called party releases the line.

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11 19800

SECTION 4 - RATES**4.1 General**

Each Customer is charged individually for each call placed through the Company. Customers are billed based on their use of the Company's long distance service.

4.2 Exemptions and Special Rates**4.2.1 Discounts for Hearing Impaired Customers**

A telephone toll message which is communicated using a telecommunications device for the deaf (TDD) by properly certified hearing or speech impaired persons or properly certified business establishments or individuals equipped with TDDs for communicating with hearing or speech impaired persons will receive, upon request, credit on charges for certain intrastate toll calls placed between TDDs. Discounts do not apply to surcharges or per call add-on charges for operator services when the call is placed by a method that would normally incur the surcharge.

- A. The credit to be given on a subsequent bill for such calls placed between TDDs will be equal to applying the evening rate during business day hours and the night/weekend rate during the evening rate period.
- B. The credit to be given on a subsequent bill for such calls placed by TDDs with the assistance of the relay center will be equal to 50% of the rate for the applicable rate period. If either party is both hearing and visually impaired, the call shall be discounted at 60% of the applicable rate.

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SECTION 4 - RATES, (CONT'D)

4.3 Directory Assistance

A Directory Assistance charge applies per intrastate directory assistance calls made from points within the State of Florida. The Customer may make two (2) requests for a telephone number per call. The Directory Assistance Charge applies regardless of whether the operator is able to supply the requested number. The first 50 Directory Assistance calls per cycle are provided at no charge from residential lines serving individuals with disabilities whose disabilities prevent or hinder the use of a telephone directory. The Customer must notify the Company and submit proof of the disability to qualify for this exemption.

Per call to directory assistance: \$0.85

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SECTION 4 - RATES, (CONT'D)

4.5 FirstWorld Message Toll Service

4.5.1 Switched Toll Service

Calls originate over standard switched access lines. Calls are billed in one minute increments after an initial minimum call duration of one minute.

Intrastate rates, per minute:

Base	\$0.1410
\$500 - \$999.99	\$0.1385
\$1,000 - \$4,999.99	\$0.1361
\$5,000 - \$9,999.99	\$0.1336
\$10,000 - \$19,999.99	\$0.1311
\$20,000 +	\$0.1287

4.5.2 Dedicated Access Toll Service

Calls originate over dedicated access lines purchased from the Company or provided by the Customer. Calls are billed in six (6) second increments after an initial minimum call duration of eighteen (18) seconds.

Intrastate rates, per minute:

Base	\$0.0980
\$500 - \$999.99	\$0.0960
\$1,000 - \$4,999.99	\$0.0941
\$5,000 - \$9,999.99	\$0.0921
\$10,000 - \$19,999.99	\$0.0902
\$20,000 +	\$0.0902

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SECTION 4 - RATES, (CONT'D)

4.5 FirstWorld Message Toll Service, (cont'd.)

4.5.3 Calling Card

The minimum call duration for billing purposes is one minute. A service charge applies to each completed call.

Rate Per Minute: \$0.18

Per Call Service Charge: \$0.35

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EFFECTIVE:

ISSUED BY: Jo Ann Hill, Regulatory Coordinator
9333 Genesee Avenue, Suite 200
San Diego, California 92121
(888) 644-4357

SECTION 4 - RATES, (CONT'D)

4.6 Toll-Free Service (i.e., 800/888)

4.6.1 Switched Access Toll Free Service

Switched Access Toll-Free Service calls are terminated over a standard switched line. Calls are billed in six (6) second increments. The minimum call duration for billing purposes is eighteen (18) seconds.

Intrastate rates, per minute:

Base	\$0.1510
\$500 - \$999.99	\$0.1484
\$1,000 - \$4,999.99	\$0.1457
\$5,000 - \$9,999.99	\$0.1431
\$10,000 - \$19,999.99	\$0.1404
\$20,000 +	\$0.1378

4.6.2 Dedicated Access Toll Free Service

Calls terminate over dedicated access lines purchased from the Company or provided by the Customer. Calls are billed in six (6) second increments. The minimum call duration for billing purposes is eighteen (18) seconds.

Intrastate rates, per minute:

Base	\$0.1080
\$500 - \$999.99	\$0.1058
\$1,000 - \$4,999.99	\$0.1037
\$5,000 - \$9,999.99	\$0.1015
\$10,000 - \$19,999.99	\$0.0994
\$20,000 +	\$0.0994

4.6.3 Monthly Recurring Charge

Per Toll-Free Number	\$10.00
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EFFECTIVE:

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9333 Genesee Avenue, Suite 200
San Diego, California 92121
(888) 644-4357

SECTION 4 - RATES, (CONT'D)

4.7 FirstWorld Debit Card Service

Network usage for Debit Card Calls is deducted from the Available Usage Balance in Customer's Debit Account in full unit increments. For debiting purposes, the minimum call usage is one (1) unit.

Per Unit Rate: \$0.20

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San Diego, California 92121
(888) 644-4357

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SECTION 4 - RATES, (CONT'D)

4.8 Operator Services

4.8.1 Per Call Service Charges

The following per-call charges apply in addition to the per minute usage rates when applicable. These charges apply in all rate periods.

Service Charge Per Call	
<u>Customer Dialed Calling Card Station</u>	
Customer Dialed/Automated	\$1.25
Customer Dialed and Operator Assisted	\$3.95
<u>Operator Station</u>	
Collect	\$2.45
Third Party Billed	\$3.95
<u>Person to Person</u>	\$6.50
<u>Operator Dialed Calling Card</u>	\$3.95
<u>Travel Card, Operator Assisted</u>	\$1.25

4.8.2 Per Minute Usage Charges

Calls are billed in one (1) minute increments after an initial minimum call duration of one (1) minute. Partial minutes are rounded up to the next minute.

Per Minute: \$0.25

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SECTION 4 - RATES, (CONT'D)

4.9 Busy Line Verification and Interrupt

Busy Line Verification, per request	\$2.00
Busy Line Interrupt, per request	\$4.00

ISSUED: July 8, 1998

EFFECTIVE:

**ISSUED BY: Jo Ann Hill, Regulatory Coordinator
9333 Genesee Avenue, Suite 200
San Diego, California 92121
(888) 644-4357**

ATTACHMENT III

FINANCIAL STATEMENTS

FirstWorld Communications, Inc. recent balance sheet and income statement are being filed under separate cover as Confidential Attachment III, subject to a Motion requesting a Protective Order for this information. This confidential exhibit is offered in support of FirstWorld Communications, Inc. financial ability to provide the services that it proposes to offer.

ATTACHMENT IV

MANAGERIAL AND TECHNICAL CAPABILITIES

SENIOR MANAGEMENT TEAM

Donald L. Sturm, Chairman and President

Donald L. Sturm brings to FirstWorld a wealth of legal, financial, technical, and managerial leadership experience. After receiving his LLB from Denver University College of Law in 1958 and an LLM (Taxation) degree from New York University Graduate School of Law in 1959, Mr. Sturm spent four years as a trial attorney for the Internal Revenue Service.

Mr. Sturm began his business career with Peter Kiewit Sons, Inc. in 1963 as Tax Counsel and was elected Vice President in 1970. Subsequently, he was appointed Chief Financial Officer and, in 1975, was elected to the Board of Directors. In 1986, he was named Vice Chairman of Peter Kiewit Sons, Inc., a position he held until 1991, when he left to pursue his own financial interests.

Mr. Sturm is owner of nine national and state banks and other financial companies located in Colorado, Wyoming, and Kansas. He is a Board member and significant shareholder of Continental Airlines, Credicom, Asia and FirstWorld Communications, Inc. He is also involved in various charitable activities, including as a Trustee of the University of Denver and the Denver Chapter of the Boy Scouts.

Robert E. Randall, P.E., Chief Operating Officer and Executive Vice President

Robert E. Randall is responsible for directing all corporate and project management activities for FirstWorld companies. He brings to FirstWorld more than twenty years of engineering management expertise. From 1974 to 1994, Mr. Randall owned and managed one of the largest electrical and mechanical engineering firms in California. In 1993, he was appointed by the State of California Board of Registration for Professional Engineers and Land Surveyors to the Electrical Technical Advisory Committee. His firm, Randall Lamb Associates, has provided engineering design and project management service to government, institutional and commercial clients for the past 21 years.

Mr. Randall earned a BSEE degree from San Diego State University in 1969 and has maintained membership in a number of technical and engineering societies.

Dennis M. Mulroy, Secretary

Dennis M. Mulroy's extensive financial background will ensure the successful financial planning and fiscal management of FirstWorld's telecommunications services. After earning a Bachelor of Business Administration Degree at the University of San Diego in 1978, Mr. Mulroy joined Arthur Young & Company in San Diego. He served as assistant controller of IMED Corporation from 1980 to 1983 and as Corporate Controller of Spectragraphics Corporation From 1983 to 1986. He served as Vice President - Finance and Administration and Corporate Secretary of Spectragraphics from 1986 until 1993. In 1993, Mr. Mulroy left Spectragraphics to serve as Chief Financial Officer of River Medial Inc.

In these positions, his responsibilities included worldwide financial reporting, cash management, human resources, data processing, stock option management, banking relations, risk management, annual budget and financial planning.

G. Bradford Saunders, Vice President - Project Development

G. Bradford Saunders develops and directs the legal, financial and administrative activities of FirstWorld's various projects. From 1978 to 1995, when he joined FirstWorld, Mr. Saunders served as President and Chief Executive Officer of Starboard Financial Corporation. In this position, he directed the entire development process and the arrangement of short- and long-term financing, joint ventures and equity capital for Starboard, its affiliated companies and clients, which included a number of public agencies. He was responsible for the development and construction activities of all Starboard subsidiaries. Mr. Saunders earned his BA in Business Administration from the University of California, Berkeley.

Kevin Timpane, Vice President - Public Policy

Kevin Timpane brings to FirstWorld more than seventeen years of experience in telecommunications regulations and public policy. At MCI, Mr. Timpane directed Industry and Carrier Relations and Regulatory organizations. He served in Strategic Planning for GTE and served on a Washington, DC "think tank" examining FCC competition policies and their effect on new technologies and innovation.



July 7, 1998
Via Overnight Delivery

210 N. Park Ave.
Winter Park, FL
32789

P.O. Drawer 200
Winter Park, FL
32790-0200

Tel: 407-740-8575

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tmi@tminc.com

Mr. William D'Haeseleer
Director Communications
Florida Public Service Commission
Division of Communication
2540 Shumard Oak Boulevard
Gerald L. Gunter Building, Room 270
Tallahassee, FL 32399-0850

DEPOSIT DATE
D 8 07 JUL 0 8 1998

RE: FirstWorld Communications, Inc.
Interexchange Carrier Application

Dear Mr. D'Haeseleer:

Enclosed for filing are the original and eight (8) copies of the above referenced application of FirstWorld Communications, Inc. FirstWorld is seeking authority to provide interexchange carrier services in Florida.

Enclosed is a check in the amount of \$250.00 to cover the filing fee.

Please acknowledge receipt of this filing by date-stamping the extra copy of this cover letter and returning it to my attention in the self-addressed, stamped envelope which has been provided for that purpose.

Questions pertaining to this application or tariff should be directed to my attention at (407) 740-8575.

Thank you for your assistance.

Sincerely,

TECHNOLOGIES MANAGEMENT, INC.
P.O. BOX 200
210 N. PARK AVE.
WINTER PARK, FL 32789-0200
(407) 740-8575

BARNETT BANK, N.A.
WINTER PARK, FL 32789
63-318/631

20167

7/7/98

PAY TO THE ORDER OF Florida Public Service Commission

\$ **250.00

Two Hundred Fifty and 00/100.....

Florida Public Service Commission
Records & Reporting
2540 Shumard Oaks Blvd.
Tallahassee, FL 32302-1500

DOLLARS
Security features included.
Details on back.

MEMO Florida Public Service Commission

TECHNOLOGIES MANAGEMENT, INC.